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Comparative Negligence and Automobile Liability Insurance

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COMPARATIVE NEGLIGENCE AND AUTOMOBILE LIABILITY INSURANCE

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If one were to compile a list of much-discussed subjects of tort law a high ranking would certainly have to be given to writings on comparative negligence and its relative advantages and disadvantages as compared with the traditional contributory negligence rule. There certainly is no dearth of scholarly articles, which explore in detail the origins of the contributory negligence rule, the extent to which comparative negligence has been accepted at present, and the theoretical advantages and disadvantages of the two rules.[1] Opponents of comparative negligence, frequently insurance counsel, have likewise been productive of articles which generally combine somewhat less impressive scholarly research and theoretical analysis with the observations of men of practical experience.[2] Others, some of whom appear to have an organizational interest in representing claimants, have been quick to reply with arguments which likewise purport to be based upon practical considerations.[3]

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Professor Z. William Birnbaum, Director of the Statistics Research Laboratory, University of Washington, has offered helpful suggestions. The National Bureau of Casualty Underwriters and the National Safety Council have also been of great help in providing statistical data, as the source citations throughout this article indicate. The author alone, however, is responsible for the somewhat unorthodox and frequently elementary statistical analysis, as well as the conclusions expressed. — C.J.P.

1 What has properly been called the classic article is Mole and Wilson, "A Study of Comparative Negligence," 17 CORN. L. Q. 333, 604 (1932). Other more recent and comprehensive treatments of the subject are Maloney, "From Contributory to Comparative Negligence: A Needed Law Reform," 11 UNIV. FLA. L. REV. 135 (1958); Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 572, 766 (1951); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 (1953); Turk, "Comparative Negligence on the March," 28 CHI-KENT L. REV. 189, 304 (1950). An extensive treatment of the subject may be found in GREGORY, LEGISLATIVE LOSS DISTRIBUTION IN NEGLIGENCE ACTIONS (1936). A study of relatively recent date devoted to the law of Great Britain, Ireland and the common law Dominions is WILLIAMS, JOINT TORTS AND CONTRIBUTORY NEGLIGENCE (1951). For a more complete bibliography, see INSTITUTE OF JUDICIAL ADMINISTRATION, COMPARATIVE NEGLIGENCE 16-21 (1955). Cf. also James, "Contributory Negligence," 62 YALE L. J. 691 (1953).

2 E.g., Benson, "Comparative Negligence—Boon or Bane," 26 INS. COUNSEL J. 204 (1956); Gilmore, "Comparative Negligence from a Viewpoint of Casualty Insurance," 10 ARK. L. REV. 82 (1955); Harkavy, "Comparative Negligence: The Reflections of a Skeptic," 43 A.B.A.J. 1115 (1957); Lipscomb, "Comparative Negligence," 1951 INS. L. J. 667; Powell, "Contributory Negligence: A Necessary Check on the American Jury," 43 A.B.A.J. 1005 (1957); Varnum, "Comparative Negligence in Automobile Cases," 24 INS. COUNSEL J. 60 (1957).

3 E.g., Averbach, "Comparative Negligence Legislation: A Cure for Our Congested Courts," 19 ALBANY L. REV. 4 (1955); Bress, "Comparative Negligence: Let Us Hearken to the Call of Progress," 43 A.B.A.J. 127 (1957); Eldredge, "Contributory Negligence: An

As a reference to any of the major studies of comparative negligence will quickly reveal, the doctrine that contributory negligence is a complete bar to recovery is now rejected in most of the common law world and retains its vitality only in this country.[4] Even in this country greater recognition has been given to the principle of comparative negligence, or the proportional sharing of damages, than one inclined to dismiss statutes as exceptions might at first think.[5] Moreover, either through legislation or judicial invention comparative negligence rules of general applicability, but varying form, prevail in seven states.[6]

It would appear that a comparative negligence standard is favored by the scholars as a workable and more just scheme than the contributory negligence rule which now prevails in most states.[7] The reasons which appeal to the scholars do not, however, appear to be convincing to the legislative mind—if one may judge by the frequency with which proposals for adoption of comparative negligence are made and defeated in state legislatures.[8] In

Outmoded Defense That Should Be Abolished," 43 A.B.A.J. 52 (1957); Haines, "Canadian Comparative Negligence Law," 23 INS. COUNSEL J. 201 (1956); Pound, "Comparative Negligence," 13 NACCA L. J. 195 (1954); Schroeder, "Courts and Comparative Negligence," 1950 INS. L. J. 791.

4 Mole and Wilson, "A Study of Comparative Negligence," 17 CORN. L. Q. 333 at 337-338 (1932); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 466 (1953); Turk, "Comparative Negligence on the March," 28 CHI-KENT L. REV. 189 at 208-245 (1950).

5 Prosser states that there are some forty statutes, apparently in successful operation, and that they have been applied in about 1200 cases. Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 467 (1953).

6 Those states are Arkansas, Georgia, Mississippi, Nebraska, South Dakota, Tennessee, and Wisconsin. The statutes and other authorities in each state are discussed briefly, infra.

7 GREGORY, LEGISLATIVE LOSS DISTRIBUTION IN NEGLIGENCE ACTIONS 4 (1936); James, "Contributory Negligence," 62 YALE L. J. 691 at 704-705 (1953); James, "Comparative Negligence," 26 UTAH BAR 109 (1956); Malone, "Comparative Negligence—Louisiana's Forgotten Heritage," 6 LA. L. REV. 125 at 142-147 (1945); Maloney, "From Contributory to Comparative Negligence: A Needed Law Reform," 11 UNIV. FLA. L. REV. 135 at 173 (1958); MORRIS, TORTS 215 (1953); Pound, "Comparative Negligence," 13 NACCA L. J. 195 at 197 (1954); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 508 (1953); Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 572 at 572 (1951); Turk, "Comparative Negligence on the March," 28 CHI-KENT L. REV. 189 at 341-345 (1950); WILLIAMS, JOINT TORTS AND CONTRIBUTORY NEGLIGENCE 259 (1951).

Justice Black, speaking for the Supreme Court of the United States, had the following to say about the two rules in Pope & Talbot, Inc. v. Hawn, 346 U.S. 406 at 408-409 (1953): "The harsh rule of the common law under which contributory negligence wholly barred an injured person from recovery is completely incompatible with modern admiralty policy and practice. Exercising its traditional discretion, admiralty has developed and now follows its own fairer and more flexible rule which allows such consideration of contributory negligence in mitigation of damages as justice requires."

8 According to a list compiled in 1951 comparative negligence legislation had been introduced in the following fifteen states, all of which have rejected the proposals: Arizona, California, Colorado, Kansas, Massachusetts, Michigan, Missouri, New York,

the absence of effective rebuttal of the scholarly view, the conviction grows that the persuasive arguments against comparative negligence are found, not in a supposed justice of denying recovery to one whose negligence contributed to his injuries, but in practical considerations of effect of adoption of such a rule. Such practical considerations include concern for the frequency with which claims would be made, the frequency with which juries would deal kindly with an injured party at the expense of a relatively innocent but financially responsible defendant, the effect of such verdicts upon negotiated settlements, the difficulties and expense of disposing of frivolous or nuisance claims, and the burden upon the courts resulting from litigation under a scheme making recoveries possible which would at the present time be barred by contributory negligence.[9]

The purpose of this article is not to re-plow the ground of history, case law, and statutory developments which has been so competently tilled by others. Nor is the purpose to give a detailed consideration of each of the practical matters mentioned above.[10] Instead, the focus of this article is on the relationship between comparative negligence and automobile liability insurance. Insurance rates and accident statistics, rather than rules of law and cases, are the primary materials. Such a consideration of the subject it might be hoped would give a positive and substantiated answer to the frequently debated but never documented question of whether adoption of comparative negligence would result in an increase in automobile liability insurance premium

North Dakota, Ohio, Oregon, Pennsylvania, Tennessee, Utah, and Washington. Lipscomb, "Comparative Negligence," 1951 INS. L.J. 667 at 674. Subsequent efforts to enact such legislation have failed in *Alabama,* 8 ALA. L. REV. 71 (1955); *Florida,* Maloney, "From Contributory to Comparative Negligence: A Needed Law Reform," 11 UNIV. FLA. L. REV. 135 at 136, n. 5 (1958); *New York,* Averbach, "Comparative Negligence Legislation: A Cure for Our Congested Courts," 19 ALBANY L. REV. 4 at 13 (1955); Note, 25 FORD. L. REV. 184, notes 5,6,7 (1956); *Pennsylvania,* O'Toole, "Comparative Negligence: The Pennsylvania Proposal," 2 VILL. L. REV. 474 (1957); and *Washington,* House Bill No. 28, 32d reg. sess., 1951; Senate Bill No. 352, 33d reg. sess., 1953; House Bill No. 40, Senate Bill No. 460, 35th reg. sess., 1957.

9 See authorities cited, note 2 supra.

10 A recently published report of a survey of Arkansas judges and lawyers on the effects of that state's adoption of comparative negligence in 1955 furnishes much valuable information with respect to many of these problems. Rosenberg, "Comparative Negligence in Arkansas: A 'Before and After' Survey," 13 ARK. L. REV. 89 (1959). Another recent study of related problems is ZEISEL, KALVEN, AND BUCHHOLZ, DELAY IN THE COURTS (1959). Of particular interest for the purposes of this article is the author's conclusion that the phenomenon of claims consciousness does exist. Their discussion of the subject appears in chapter 20 of the book.

rates.[11] As will appear, however, such precision does not seem to be possible. Nevertheless it does appear possible to draw some meaningful conclusions about the limits within or extent to which comparative negligence does affect premium rates, if indeed it has any effect. The insurance statistics also contain information with respect to the effect of comparative negligence in stimulating the filing of claims and the size of claim settlements. Further observations may be made with respect to the frequently expressed view that even in states in which the contributory negligence rule prevails comparative negligence is in fact practiced by all concerned, including adjusters, attorneys, juries, and even judges. In this way it is hoped something will be added to the information available for evaluation of the practical considerations which appear to control the decision to adopt or reject a comparative negligence standard in lieu of the contributory negligence rule.

OBSTACLES TO DETERMINING THE EFFECTS OF COMPARATIVE NEGLIGENCE ON LIABILITY INSURANCE

As with discussions about the weather, many people have talked about the possible effect of comparative negligence on liability insurance premium rates, but nobody has done anything to demonstrate that effect. To some it appears to be so obvious that comparative negligence would increase the rates that no evidentiary data is advanced to support the proposition. Others, premising their conclusion on the assumption that comparative negligence is the true test applied in almost every case, are equally certain that comparative negligence has no effect on liability insurance rates. One skeptical view finds significance in the fact that insurance counsel, who have available to them the necessary data, have failed to produce statistical support for the proposition that rates are increased.[12] Another author does state that a 10-year study indicates that automobile liability rates in Wisconsin, where a form of comparative negligence prevails, exceed the rates for comparable cities and areas in surrounding

[11] E.g., Averbach, "Comparative Negligence Legislation: A Cure for Our Congested Courts," 19 ALBANY L. REV. 4 at 11 (1955); Bress, "Comparative Negligence," 43 A.B.A.J. 127 at 129 (1957); Grubb and Roper, "Comparative Negligence," 32 NEB. L. REV. 234 at 246-247 (1952); Hayes, "New York Should Adopt a Comparative Negligence Rule," 27 N.Y.S. BUL. 288 at 289 (1955); Harkavy, "Comparative Negligence," 43 A.B.A.J. 115 at 116 (1957); Pound, "Comparative Negligence," 13 NACCA L.J. 195 at 198-199 (1954); note, 30 N.D. L. REV. 105 at 117 (1954).

[12] Maloney, "Comparative Negligence: A Needed Law Reform," 11 UNIV. FLA. L. REV. 135 at 163 (1958).

states by 17 to 64 percent.[13] The inference, however, that this variance is caused by comparative negligence alone would seem to be destroyed by the improbability that a single cause would have such diverse effects. Meanwhile, no one seems sufficiently concerned to enter upon speculation as to whether comparative negligence, which would permit insurers to maintain subrogation actions otherwise barred by the insured's negligence, would result in decreased rates for insurance against loss by collision.[14] Perhaps, despite the attempt made here, the explanation of this inactivity is that, as is the case with the weather, nothing can be done about it.

Safety Factors

Certainly the obstacles to detecting an effect of a rule of law upon insurance rates are both numerous and imposing. Obviously, one may not simply compare the rates of a state with a form of comparative negligence with the rates of a neighboring state in which the contributory negligence rule prevails, and conclude that any difference in rates is attributable to the legal effect given to negligence on the part of the injured party. There are almost certain to be differences in safety conditions in the two states, and as might be expected and can be demonstrated, safety conditions and the accident rate play a much more important part in determining the level of insurance rates than do differences in this rule of law. Safety conditions within a state in turn depend upon many variables, such as the physical condition of streets and highways, the degree to which principles of safety engineering have been incorporated in construction, the traffic

[13] Grubb and Roper, "Comparative Negligence," 32 NEB. L. REV. 234 at 246-247 (1952).

[14] As pointed out infra, one of the difficulties of comparing insurance rates in different states is that the rates become effective in different states upon different dates. While adjustment can be made with respect to liability insurance on the basis of a monthly change factor to reduce the rates to a common date, the addition of the variables of the number of automobile models, the changing automobile styles of the models, and the declining values of autos with age and obsolescence makes similar adjustments with collision insurance seem unreal.

A sample check of the rates published by National Auto Underwriters Association for $50.00 deductible collision insurance on a Chevrolet 6-cylinder 4-door Bel Air sedan, and in effect September 1959, did show that Wisconsin rates for the remainder of state territory were lower than the rates in Illinois, Michigan, and Minnesota though higher than the rates for Iowa. Mississippi's comparable rates were lower than those applicable in its neighboring states. On the other hand, the Arkansas rates for the remainder of state territory were higher than those applicable in Missouri, Oklahoma, and Mississippi, but lower than those applicable in Louisiana and Tennessee. The Georgia rates applicable were also higher than those applicable in Alabama, Florida, North Carolina, and South Carolina, but lower than those applicable in Tennessee.

volume, the distribution of the traffic between rural and urban driving, the weather conditions which prevail, the level of driver education and the degree to which safety-mindedness has been impressed upon the driving population, the traffic laws, such as speed limits, the minimum age for drivers' licenses, the tests administered upon granting and renewal of licenses, and even the liquor laws and licensing policies, as well as the effectiveness with which traffic laws are enforced.[15]

Economic Variables

Another cluster of factors affecting insurance rates may be characterized as economic. Tremendous differences may exist in the economies of neighboring states. For example, the 1956 per capita income in Mississippi, a comparative negligence state, was $964, whereas the 1956 per capita income in the neighboring state of Louisiana was $1,444.[16] Manufacturers' payrolls are almost double farm income in Wisconsin, whereas in adjoining Iowa farm income is more than triple the total of manufacturers' payrolls.[17] These differences in economic level and type of activity are reflected in the damages awarded for loss of earnings. They also affect jury estimates of the value to be assigned pain and suffering or the loss of a limb. Economic factors have a secondary effect through their direct effect on highway construction, repair, and the type and density of traffic. Finally, the effectiveness of governmental regulation of the insurance industry and the rates which it charges varies greatly from state to state. Thus, rates of a state which are higher in relation to the frequency of accidents and the economic level than those of another state may reflect an insurance commission's acceptance of lower permissible loss ratios, or higher insurance industry profits.

Legal Factors

Turning to legal considerations, it is also obvious that differences in other rules of law may be equally significant in determining the level of insurance rates. For example, in Wisconsin

15 For a discussion of the numerous causes of traffic accidents, see DESILVA, WHY WE HAVE AUTOMOBILE ACCIDENTS (1942). The National Safety Council's annual publication, *Accident Facts*, contains much statistical information about traffic accidents. For assistance in interpretation of such statistics, see NATIONAL CONFERENCE ON UNIFORM TRAFFIC ACCIDENT STATISTICS, USES OF TRAFFIC ACCIDENT RECORDS (1947).

16 THE WORLD ALMANAC — 1958, p. 752.

17 Id., pp. 657, 688.

a statute allows the joinder of the insurance company concerned as a defendant in the action brought against the alleged tortfeasor.[18] The general rule is that prejudicial error may be committed by the intentional injection of evidence showing the defendant carries liability insurance because of its tendency to induce larger verdicts.[19] If there is any factual basis for this rule, the Wisconsin joinder statute must be assigned considerable responsibility for any excess of Wisconsin rates over those of its neighbors attributable to legal rules.

Other legal factors which might affect insurance rates include the presence or absence of a "guest statute," requiring proof of gross negligence, recklessness, or intentional wrongdoing, or satisfaction of some other difficult test as a basis for imposing liability to a gratuitous passenger in an automobile.[20] It is conceivable that rates would be affected by the acceptance of the family car doctrine, or a statutory basis[21] for imposing liability on the owner of an automobile for injuries inflicted by others using the vehicle. Statutory violations, particularly violations of traffic laws, receive varying treatment in different jurisdictions, constituting negligence per se in some states and only evidence of negligence in others.[22] These differences might be expected to affect insurance rates, as would differences in the degree to which the presence of contributory negligence is determined by the same standards used

18 Wis. Stat. (1957) §§85.93, 260.11 (1). See MacDonald, "Direct Action Against Liability Insurance Companies," 1957 WIS. L. REV. 612.

19 4 A.L.R. (2d) 764 at 765 (1949). The Wisconsin court appears to have little doubt that the joinder statute has increased recoveries in that state. In Bergstein v. Popkin, 202 Wis. 625 at 633, 233 N.W. 572 (1930), the court said: "Whether or not it is an indictment of our jury system, it is a fact recognized by everyone that the purpose of making the insurance company a party defendant is to increase the award of damages made against the insured. That it has that effect, no one familiar with the trial of cases can doubt."

20 Wisconsin, for example, has no host-guest statute, which might be expected to contribute to higher rates. However, one authoritative view is that the net effect of such statutes on recoveries by guests as a class is not materially different from that which obtains under the common law rules developed in Wisconsin. Campbell, "Host-Guest Rules in Wisconsin," 1943 WIS. L. REV. 180 at 203.

Neither Georgia nor Mississippi, both states with comparative negligence rules and the subject of detailed investigation, infra, have host-guest statutes. Arkansas, another state with a comparative negligence statute, does have a statute requiring the proof of willful and wanton operation. Ark. Stat. Ann. (1947) §75.913. For a listing of state statutes and a discussion of the host-guest liability problem, see 2 HARPER AND JAMES, TORTS 950-962 (1956).

21 See 2 HARPER AND JAMES, TORTS 1419-1428 (1956); PROSSER, TORTS, 2d ed., 369-372 (1955).

22 2 HARPER AND JAMES, TORTS 997 (1956); PROSSER, TORTS, 2d ed., 152-164 (1955). For an interesting attempt to compare the difficulties of recovery presented by varying treatments of contributory negligence in Wisconsin and the four states surrounding it, see comment, 1954 WIS. L. REV. 95.

to determine what constitutes negligence on the part of the defendant.[23] Varying forms of the last clear chance doctrine produce disparity of treatment of contributory negligence in different states,[24] and thus permit a range for differences in the operative effects of comparative and contributory negligence in comparisons between various states. Moreover, as will be seen, considerable variation exists in the formulation of the comparative negligence rules of the various states, again destroying any expectation that a fixed or quantitative difference exists when so-called comparative negligence state rates are compared with rates of states enforcing a contributory negligence rule. For example, recognition of assumption of the risk as a complete defense may make less distinct the differences between a contributory negligence rule and a comparative negligence rule.[25]

The Existing Data

The difficulty of sorting out and identifying the effect of any one of these many variables affecting rates is made even more difficult, or perhaps impossible, by the deficiencies and inadequacies of existing statistical and rate data. Of course, the existing data were not accumulated for the purpose of detecting an effect due to the different legal consequences of contributory negligence. Accordingly, it is necessary to mine, stamp, and refine the existing raw materials in order to extract any information on the subject.

There is, for example, no single liability rate for a particular state. The number of insurance companies engaged in the casualty insurance business in each state is an assurance of diversity within the limits established by competition. To a considerable extent this difficulty is overcome by the rate formulation services performed by associations of casualty insurance companies, such as

23 Cf. James, "Contributory Negligence," 62 YALE L.J. 691 at 723-729 (1953).

24 2 HARPER AND JAMES, TORTS 1245-1255 (1956); PROSSER, TORTS, 2d ed., 290-296 (1955). A view that the version of last clear chance known as the "humanitarian doctrine," and applied in Missouri to defendants operating motor vehicles [HARPER AND JAMES, TORTS 1252-1253 (1956); PROSSER, TORTS, 2d ed., 294-295 (1955)], is productive of higher liability insurance rates than comparative negligence finds some support in comparison of the insurance rates applicable in Missouri and Arkansas. See Tables IV-A and V.

25 Insofar as assumption of the risk is merely another way of stating that there is no liability in the absence of a duty, recognition of the defense under a comparative negligence system would seem to be of little importance. But conduct which might be more properly characterized as contributory negligence is sometimes recognized as a defense under the label of assumption of the risk. E.g., Southland Butane Gas Co. v. Blackwell, 211 Ga. 665, 88 S.E. (2d) 6 (1955). Cf. Storlie v. Hartford Accident & Indemnity Co., 251 Wis. 340, 28 N.W. (2d) (1947); Saxton v. Rose, 201 Miss. 814, 29 S. (2d) 646 (1947).

the National Bureau of Casualty Underwriters. On the basis of the losses reported to these associations actuarial determinations are made of the rates which should be charged for various categories of risks in the various states. This information is furnished to members and sold to other companies which wish to purchase the services of the associations. The National Bureau of Casualty Underwriters also serves as an agent for its members, filing new rates with the various state insurance commissions for approval. Departures from these rates for competitive purposes may be and are made by those non-member companies which merely purchase the rate determination services of the bureau. Other companies arrive at a rate structure in various independent ways.

Of course, even what uniformity is obtained through acceptance of the rate structure of a particular association does not permit free comparison of the rates of one state with rates of another state. The National Bureau of Casualty Underwriters has, for example, divided each state into a number of rate territories for the purpose of accumulating loss statistics and for fixing of rates. Several territories in a particular state may be combined in a single territorial grouping with a single rate structure for all territories within that grouping, pending accumulation of sufficient experience to permit more refined treatment of each territory. Determination of what area shall be encompassed in a territory or a territorial grouping depends upon a number of variable factors. Without uniformity in definition, territories in different states may be compared only with extreme difficulty. For most of the states the bureau has established one catch-all territory, denominated "remainder of the state," which includes all the areas which did not have sufficiently distinctive characteristics to merit treatment as a separate territory. It is this territorial rate structure which appears to offer the greatest opportunity for comparison, since it generally covers rural and small city areas, where the differences between territories in the accident rate caused by density of population, volume of traffic, and varying degrees of vigilance in municipal law enforcement are minimized. It is, however, far from an ideal unit for comparison.

In addition to the possibilities of classifying insurance by breadth of coverage in monetary terms, the risks insured may be classified in a number of other ways. One bureau classification of private automobiles, Class I-A, covers individually-owned vehicles, driven for pleasure and not used for business or for transportation to or from work, and not owned or driven by a male under the

age of 25. Another classification covers similarly-described vehicles, except that transportation to and from work not in excess of ten miles in each direction is allowed. Other classifications of privately-owned vehicles exist, of course, and commercial vehicles are subject to many classifications based upon the type of vehicle and its use. Of course, even standard policies are subject to varying constructions in different states. The effect of this diversity of classification with respect to privately-owned automobiles is, however, greatly minimized by the use of a rate for a particular classification as the base rate, with the rates for other classifications computed as fixed percentages of the base rate. For example, in most states Class I-A is the base rate for the privately-owned automobile, and the rates for other risk classifications of privately-owned vehicles are computed as fixed percentages of that rate.[26]

Comparison of the rates effective in different states is further complicated by the fact that there is no uniformity between states in the dates upon which filings of rates take place. For example, the National Bureau of Casualty Underwriters filed the Class I-A rate, now effective in Oklahoma, on October 23, 1957, whereas the rate for the same classification in Arkansas was filed on December 19, 1958. In light of the general inflationary trend, direct comparison of these rates would be misleading. Some correction for the differences in dates of filing can be made, as has been done in the computations made herein, by determining a monthly rate of increase or decrease between two filing dates, and using that monthly rate figure to reduce the rates of all states to a hypothetical common filing date.

Differences in insurance rates exist, of course, not only because of the claim consciousness of the population of a state but also because of the difference in safety conditions in various states and the frequency with which insured vehicles are involved in accidents. Before comparison of rates may be made for the purpose of determining whether comparative negligence has an effect on the rates, proper adjustment must be made for the difference in the rates caused by a higher or lower accident rate. However,

[26] The rate structure in the commercial classification of the bureau no longer follows this pattern. Within the privately-owned automobile classification, the additional premiums for categories of increased risks are determined as a fixed percentage of the Class I-A rate. A different set of percentage ratios are used for determining the increased premium applicable in large cities than is used with small cities and rural areas. Two sets of percentage ratios for these two types of territories have been established on a country-wide basis. However, there are variations in a number of states.

the available statistical data on non-fatal accidents and injuries which might be used to make such an adjustment is far from satisfactory. Although there exist uniform definitions of motor vehicle accidents,[27] these definitions are not used by all accident reporting authorities, and it appears that the definitions are not applied in the same manner by those authorities which do use them. For example, during the year 1957 the ratio of reported injuries to reported deaths varied from six injuries to one death in Arkansas to 241 injuries to one death in Massachusetts.[28] Such variation exists, not because of true differences in the ratios, but because of what injuries are counted.

Death, of course, has a uniformity and importance which does give reliability to death statistics. Upon appraisal of the relative reliability of the reports available, the National Safety Council has adopted a uniform ratio of thirty-five disabling injuries for each death for estimating the number of disabling injuries for each state.[29] While such an estimate is undoubtedly more reliable than the available reported information, it obviously rests upon an assumption which is incorrect. Other statistics indicate that, even after allowance for poorer reporting in rural areas, the ratio of injuries to fatalities is much higher in urban regions than in rural areas, probably because the higher rate of speed in rural accidents is more likely to produce a fatality than is the case in an urban accident.[30] Since the relative distribution of the population in urban and rural regions varies greatly in the various states, it must be acknowledged that even the best indicator of safety conditions in the various states—that found in death statistics —is inaccurate.

Finally, the available statistics are frequently presented in a form which renders extremely hazardous their manipulation by persons unskilled in statistical methods. That description is unfortunately appropriate for most members of the legal profession who are concerned with the subject. Chance and fortuitous combinations produce distortions, particularly in statistical analysis involving small samples and fields; and with the limited number

27 U.S. DEPT. OF HEALTH, EDUCATION AND WELFARE, UNIFORM DEFINITIONS OF MOTOR VEHICLE ACCIDENTS, 2d rev. (1953).

28 TRAFFIC SAFETY, p. 34 (December 1957).

29 Letter from the National Safety Council, March 26, 1958.

30 DESILVA, WHY WE HAVE AUTOMOBILE ACCIDENTS 120 (1942); NATIONAL SAFETY COUNCIL, ACCIDENT FACTS—1957, 50, 55.

of states in the country as well as the small number of states with comparative negligence the risk of distortion here is high. Statistics themselves prove nothing; a cause and effect relationship must be read into them. And one who has a priori knowledge of the cause and effect probably can find at least some statistics which demonstrate what he already knew.[31]

The lawyer unskilled in statistics may take encouragement from the statement of the National Conference on Uniform Traffic Accident Statistics that experience has shown that relatively advanced statistical techniques are not normally necessary or practical in traffic accident analysis work.[32] But, having surveyed the difficulties presented by the multitude of operative factors and the inadequacy of the data available, he will abandon hope that effect of comparative negligence can be shown with an accuracy expressible in fixed percentages or many figured decimal ratios. He may even agree with one eminent scholar that the windfall to plaintiffs caused by retention of the last clear chance doctrine in states with comparative negligence rules must be reflected in insurance rates.[33] But he will feel sure that no instrument now exists which can measure that consequence.

THE COMPARATIVE NEGLIGENCE STATES

As mentioned above, comparative negligence exists in many states in the form of statutes of limited application, and, indeed, it may be found throughout the nation in litigation under the Federal Employers' Liability Act. However, only seven states have comparative negligence rules of general applicability which

31 E.g., Powell, "Contributory Negligence: A Necessary Check on the American Jury," 43 A.B.A.J. 1005 at 1007 (1957), cites statistics indicating that even under contributory negligence rules 85% to 90% of all claims asserted are settled, but distinguishes the comparable statistics of litigation under the comparative negligence rule of the Federal Employers Liability Act, in which 87% of the claims are reported to be settled by compromise prior to verdict, on the basis that in such cases only one claimant out of each thousand fails to obtain compensation. On the other hand, statistics reported in ZEISEL, KALVEN, AND BUCHHOLZ, DELAY IN THE COURTS 40 (1959), indicate that in New York city only 1.7% of all personal injury claims are tried to completion. Assuming even a 50% victory rate for plaintiffs, the total result in proportion of claimants receiving compensation would appear to be little different from that indicated in the statistics cited by Powell.

Or, for another example, see the suggestion, infra note 72, of a possible use of statistics to support a conclusion that comparative negligence encourages bad driving habits and accidents.

32 NATIONAL CONFERENCE ON UNIFORM ACCIDENT STATISTICS, USES OF TRAFFIC ACCIDENT RECORDS 153 (1947).

33 Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 496 (1953).

might be expected to affect automobile liability insurance rates. The comparative negligence rules of even these seven states are far from uniform, and a brief summary of their differences seems a necessary basis for evaluation of statistical data.

Georgia

Detailed consideration of the comparative negligence rule of Georgia may be found in any of the major articles on the subject of comparative negligence.[34] The rule appears to have originated in a series of common law decisions in actions against railroads in which the Georgia court drew on a few contemporary English decisions as authority for the proposition that fault on the part of the plaintiff should go to mitigation of the damages. The codifiers of the Georgia Code of 1860-1862 restated and incorporated the principle of these cases, as they were authorized to do, in that code.[35] Although the present code language[36] would appear to limit application of the principle to cases involving railroad defendants, this in fact has not been the case, and the principle is one of general applicability. However, one who judges comparative negligence rules with the standards of a purist will find some defects in the Georgia rule. It applies only where the fault of the plaintiff is less than that of the defendant, producing a mitigation of damages in proportion to the fault attributable to the plaintiff. The bar to recovery still exists where plaintiff's fault is equal to or greater than that of the defendant. Moreover, another statutory provision[37] has been applied in connection with

[34] Mole and Wilson, "A Study of Comparative Negligence," 17 CORN. L. Q. 604 at 635-637 (1932); Maloney, "From Contributory to Comparative Negligence: A Needed Law Reform," 11 UNIV. FLA. L. REV. 135 at 156-157 (1958); Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 766 at 777-780 (1951); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 489-490, 497 (1953); Turk, "Comparative Negligence on the March," 28 CHI-KENT L. REV. 304 at 326-333 (1950).

[35] The better discussions of this development are found in Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 766 (1951) and Turk, "Comparative Negligence on the March," 28 CHI-KENT L. REV. 304 (1950).

[36] Ga. Code Ann. (1935) §94-703: "Consent or negligence of person injured as defense: comparative negligence as affecting the amount of recovery—No person shall recover damages from a railroad company for injury to himself or his property, where the same is done by his consent or is caused by his own negligence. If the complainant and the agents of the company are both at fault, the former may recover, but the damages shall be diminished by the jury in proportion to the amount of fault attributable to him."

[37] Ga. Code Ann. (1935) §105-603: "If the plaintiff by ordinary care could have avoided the consequences to himself caused by the defendant's negligence, he is not entitled to recover. In other cases the defendant is not relieved, although the plaintiff may in some way have contributed to the injury sustained."

the comparative negligence rule so as to create what has appropriately been called a reverse last clear chance doctrine[38] which completely bars recovery if the plaintiff could have avoided the consequences of defendant's negligence by the exercise of ordinary care. This provision has been applied rigorously by the Georgia courts,[39] and would bar recovery even in a case in which the defendant was guilty of gross negligence.[40] It also appears that it may be utilized to give complete effect to contributory negligence as a bar in the guise of assumption of the risk.[41] Nevertheless, the consensus appears to be that the Georgia rule represents one of the more comprehensive forms of comparative negligence.

Mississippi

The first comparative negligence statute of general applicability in this country was enacted in Mississippi in 1910.[42] As might be expected the statute and case law have been the subject of extensive comment in the various writings on comparative negligence.[43] The statute creates what might be called true comparative negligence in that it rejects the requirement found in Georgia law, that the plaintiff's negligence be less than that of the defendant. Under this statute it is conceivable that one whose negligence constituted 80 or 90 percent of the fault causing his injuries could recover 10 or 20 percent of his damages from the defendant. Likewise, the statute permits recovery by one who was guilty of "gross negligence," provided that a proportional

38 Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 497 (1953). Cf. Maloney, "From Contributory to Comparative Negligence: A Needed Law Reform," 11 UNIV. FLA. L. REV. 135 at 156 (1958); Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 766 at 778 (1951).

39 Central of Georgia Ry. Co. v. Roberts, 213 Ga. 135, 97 S.E. (2d) 149 (1957); Brown v. Atlanta Gas Light Co., 96 Ga. App. 771, 101 S.E. (2d) 603 (1957).

40 Oast v. Mopper, 58 Ga. App. 506, 199 S.E. 249 (1938).

41 Southland Butane Gas Co. v. Blackwell, 211 Ga. 665, 88 S.E. (2d) 6 (1955).

42 Miss. Code Ann. (1942) §1454: "In all actions hereafter brought for personal injuries, or where such injuries have resulted in death, or for injury to property, the fact that the person injured, or the owner of the property, or person having control over the property may have been guilty of contributory negligence shall not bar a recovery, but damages shall be diminished by the jury in proportion to the amount of negligence attributable to the person injured, or the owner of the property, or the person having control over the property."

§1455: "All Questions of negligence and contributory negligence shall be for the jury to determine."

43 Mole and Wilson, "Comparative Negligence," 17 CORN. L. Q. 604 at 640-643 (1932); Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 766 at 795 (1951); Shell and Bufkin, "Comparative Negligence in Mississippi," 27 MISS. L. J. 105 (1956); note, 17 TEMP. L. Q. 276 at 283-285 (1943); GREGORY, LEGISLATIVE LOSS DISTRIBUTION IN NEGLIGENCE ACTIONS 57-59 (1936).

reduction in the damages awarded is made.[44] Assumption of the risk constitutes a bar to recovery.[45] Nevertheless, the Mississippi rule presents comparative negligence in its purest and most comprehensive form, making that state's rule a desirable subject of investigation for present purposes.

Wisconsin

The comparative negligence law of Wisconsin is likewise based upon a statute,[46] and has been the subject of extensive comment in writings on comparative negligence.[47] The law, enacted in 1931, resembles that of Georgia in that recovery is allowed only in cases in which the plaintiff's negligence is not as great as that of the defendant. In such cases damages are reduced in the proportion which plaintiff's negligence bears to the total negligence involved in producing his injuries.[48] Assumption of the risk is recognized as a complete defense, but the statute does not require diminution of the damages where the defendant has been guilty of gross negligence.[49] Like the Georgia and Mississippi rules, the Wisconsin law appears to be a desirable subject of investigation.

Arkansas

The most recent adoption of a comparative negligence rule of general applicability occurred in Arkansas in 1955.[50] Based upon a draft prepared by Dean Prosser,[51] the 1955 act followed the

44 Mole and Wilson, "Comparative Negligence," 17 CORN. L.Q. 604 at 641 (1932); Shell and Bufkin, "Comparative Negligence in Mississippi," 27 MISS. L.J. 105 at 112-113 (1956).

45 Shell and Bufkin, "Comparative Negligence in Mississippi," 27 MISS. L. J. 105 at 108-109 (1956).

46 Wis. Stat. Ann. (1957) §331.045: "Contributory negligence shall not bar recovery in an action by any person or his legal representative to recover damages for negligence resulting in death or in injury to person or property, if such negligence was not as great as the negligence of the person against whom recovery is sought, but any damages allowed shall be diminished in the proportion to the amount of negligence attributable to the person recovering."

47 Campbell, "Wisconsin's Comparative Negligence Law," 7 WIS. L. REV. 222 (1932); Campbell, "Ten Years of Comparative Negligence," 1941 WIS. L. REV. 289; Knoeller, "Review of the Wisconsin Comparative Negligence Act," 41 MARQ. L. REV. 397 (1958); Padway, "Comparative Negligence," 16 MARQ. L. REV. 3 (1931); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 490-494 (1953); Whelan, "Comparative Negligence" 1938 WIS. L. REV. 465; GREGORY, LEGISLATIVE LOSS DISTRIBUTION IN NEGLIGENCE ACTIONS 63-67 (1936).

48 Campbell, "Ten Years of Comparative Negligence," 1941 WIS. L. REV. 289 at 291-292.

49 Id. at 297-301.

50 Ark. Acts 1955, No. 199.

51 Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 508 (1953).

pure comparative negligence principle of the Mississippi law and allowed recovery regardless of whether or not the plaintiff's negligence exceeded that of the defendant. Two years later, the legislature found that there was lack of understanding and uniformity in the application of the 1955 act and that with the law in its then-existing state, great confusion and unfairness occurred in the trial of negligence cases. Accordingly, the statute was repealed.[52] However, Arkansas did not return to a contributory negligence rule, for the repealing statute enacted in place of the 1955 act the more limited version of comparative negligence which prevails in Georgia and Wisconsin. And so since 1957 recovery has been allowed in Arkansas only where the plaintiff's negligence is "of less degree" than the negligence of the person causing the injuries.[53]

The short time since adoption of comparative negligence in Arkansas, as well as a possible unsettling effect from the 1957 change of the law, might be considered to render the state's insurance situation an unsuitable subject of investigation. Whatever defects as a subject might be caused by uncertainties about whether the full effect of the change has yet been experienced would seem to be more than offset by the unique opportunity afforded to analyze the changes which occur within a state which does adopt comparative negligence. One very valuable study, based on the responses to a survey of Arkansas judges and lawyers with extensive experience in personal injury litigation, has led its author to conclude that introduction of comparative negligence in Arkansas brought perceptible changes to the course of personal injury litigation, but did not drastically alter the size or quality of the courts'

52 Ark. Acts 1957, No. 296. The reasons for the repeal are said to be dissatisfaction with a rule permitting recovery by one as much as 90% at fault as well as the confusion about the proper handling of cases involving set-off of counterclaims by insured parties. Note, 11 ARK. L. REV. 391 at 392 (1957). For a discussion of the latter problem, see Leflar and Wolfe, "Must the Insurer Reimburse the Insured for His Personal Loss Credited Against the Judgment?" 11 ARK. L. REV. 71 (1956).

53 Ark. Stat. Ann. (Supp. 1959) §27-1730.1: "Contributory negligence shall not bar recovery of damages for any injury, property damage or death where the negligence of the person injured or killed is of less degree than the negligence of any person, firm, or corporation causing such damage."

§27-1730.2: "In all actions hereafter accruing for negligence resulting in personal injuries or wrongful death or injury to property, the contributory negligence shall not prevent a recovery where any negligence of the person so injured, damaged, or killed is of less degree than any negligence of any person, firm, or corporation causing such damage; provided that where such contributory negligence is shown on the part of the person injured, damaged or killed, the amount of the recovery shall be diminished in proportion to such contributory negligence."

burdens in processing cases.[54] Against a background of such conclusions, study of changes in automobile liability insurance in Arkansas may be particularly informative.

Tennessee

The courts of Tennessee early developed a comparative negligence rule of general applicability but limited scope.[55] In that state plaintiff's contributory negligence which is a proximate cause of his injuries bars recovery, but remote contributory negligence of the plaintiff is considered only for the purposes of mitigating damages. The supreme court of the state has expressly repudiated the doctrine of comparative negligence,[56] and, as Dean Prosser has noted, in practical operation the Tennessee rule has resulted in apportionment only in cases in which the defendant had the last clear chance.[57] Viewed in this light, there is no greater expectation that so-called comparative negligence rule of Tennessee will be reflected in automobile liability insurance statistics than would be the case for any of the other variations of the last clear chance rule. Considering the obstacles mentioned above, that expectation must be regarded as an insubstantial possibility.

Nebraska and South Dakota

The comparative negligence rules of Nebraska and South Dakota are both statutory, that of South Dakota being a 1941 copy[58] of a law adopted in Nebraska in 1913.[59] The statute pro-

54 Rosenberg, "Comparative Negligence in Arkansas: A 'Before and After' Survey," 13 ARK. L. REV. 89 at 108 (1959).

55 Mole and Wilson, "A Study of Comparative Negligence," 17 CORN. L.Q. 604 at 611-613 (1932); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 485-486, 496-497 (1953); Turk, "Comparative Negligence on the March," 28 CHI-KENT L. REV. 304 at 313-317 (1950).

56 East Tennessee, V. & G. Ry. Co. v. Hull, 88 Tenn. 33, 12 S.W. 419 (1889). Cf. Atlantic Coastline R. Co. v. Smith, (6th Cir. 1959) 264 F. (2d) 428 at 432.

57 Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 497 (1953).

58 S.D. Code (Supp. 1952) §47.0304-1.

59 Neb. Rev. Stat. (1956) §25-1151. The language of both the Nebraska and South Dakota statutes is as follows:

"In all actions brought to recover damages for injuries to a person or to his property caused by the negligence of another, the fact that the plaintiff may have been guilty of contributory negligence shall not bar a recovery when the contributory negligence of the plaintiff was slight and the negligence of the defendant was gross in comparison, but the contributory negligence of the plaintiff shall be considered by the jury in the mitigation of damages in proportion to the amount of contributory negligence attributable to the plaintiff; and all questions of negligence and contributory negligence shall be for the jury."

vides that contributory negligence shall not bar recovery when the contributory negligence of the plaintiff was slight and the negligence of the defendant was gross in comparison. In such cases the jury is to consider the contributory negligence in mitigation of damages in proportion to the amount of the contributory negligence. As reference to the discussions[60] of the Nebraska and South Dakota statutes will soon reveal, incorporation of the treacherous words, "slight" and "gross" has been productive of considerable litigation which has failed to produce certainty. While statements of the Nebraska court made in contexts in which direct consideration of the problem was not required indicate that ratios of one to four[61] or one to six[62] might comply with the requirement that plaintiff's negligence be slight, the concensus of the writers,[63] which is confirmed by the cases,[64] is that essentially these states have retained the doctrine of contributory negligence. This being so, these states, like Tennessee, do not provide workable opportunities for learning whether or not comparative negligence has an effect upon automobile liability insurance.

They do, however, furnish an example of the difficulty of explaining a variation in rates in states which have the same rule governing contributory negligence and also have a comparable climate and economy. Thus, Table I presents some basic data concerning these states and their immediate neighbors to the north and south. While it comes as no surprise that the premium rate for the remainder of the state territory is not the same for the two states, South Dakota's lower rate is not what would be expected in light of the fact that that state has a considerably higher rate of deaths per registered automobile than does Nebraska. One might attempt to explain the higher premium rate in Nebraska on the basis of the higher per capita income and the higher proportion of urban dwellers in that state, pointing out that these

60 Baylor, "Comparative Negligence in Nebraska," 10 S. D. B. J. 146 (1941); Grubb and Roper, "Comparative Negligence," 32 NEB. L. REV. 234 (1952); Mole and Wilson, "A Study of Comparative Negligence," 17 CORN. L. Q. 604 at 637-639 (1932); Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 766 at 793-795 (1951); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 486-489 (1953); note, 17 NEB. L. BUL. 68 (1938); GREGORY, LEGISLATIVE LOSS DISTRIBUTION IN NEGLIGENCE ACTIONS 61-63 (1936).

61 Sgroi v. Yellow Cab and Baggage Co., 124 Neb. 525, 247 N.W. 355 (1933).

62 Patterson v. Kerr, 127 Neb. 73, 254 N.W. 704 (1934).

63 GREGORY, LEGISLATIVE LOSS DISTRIBUTION IN NEGLIGENCE ACTIONS 61 (1936); Philbrick, "Loss Apportionment in Negligence Cases," 99 UNIV. PA. L. REV. 766 at 794 (1951); Prosser, "Comparative Negligence," 51 MICH. L. REV. 465 at 487 (1953).

64 Allen v. Kavanaugh, 160 Neb. 645, 71 N.W. (2d) 119 (1955); Pleinis v. Wilson Storage and Transfer Co., 75 S.D. 397, 66 N.W. (2d) 68 (1954); Friese v. Gulbrandson, 69 S.D. 179, 8 N.W. (2d) 438 (1943).

TABLE I

NEBRASKA-SOUTH DAKOTA COMPARISON

State	Class I-A[1] Premium Rate	Policy Claim[2] Frequency	Deaths Per[3] Reg. Auto 1954-1956	Per Capita[4] Income 1956	Urban-[5] Rural Ratio 1950
Nebraska	$23.00	14	1.91	$1588.	.88
South Dakota	21.00	10	2.46	1330.	.50
North Dakota	25.00	10	2.22	1365.	.37
Kansas	29.00	15	2.38	1668.	1.09

[1] Remainder of the State Premium adjusted as of January 31, 1958, for Class I-A Bodily Injury and Property Damage Coverage within limits of $5,000 per claim and $10,000 per accident for bodily injury and $5,000 per accident for property damage—Rates of National Bureau of Casualty Underwriters.

[2] Number of personal injury claims incurred per 100 automobiles insured on a statewide basis during 1954-1956. Letter dated November 5, 1958, from the National Bureau of Casualty Underwriters.

[3] Traffic deaths during 1954-1956 divided by the number of Registered automobiles, including taxis, but excluding trucks, busses, and publicly-owned vehicles. Death statistics taken from the WORLD ALMANAC, 1958, p. 309, and the WORLD ALMANAC, 1957, p. 367. Automobile Registration statistics taken from the STATISTICAL ABSTRACT OF THE UNITED STATES, 1957, p. 554.

[4] WORLD ALMANAC, 1958, p. 752.

[5] Ratio of urban population to rural population. THE STATISTICAL ABSTRACT OF THE UNITED STATES, 1957, p. 22.

factors would also explain why Kansas' rate exceeds that of Nebraska. But the argument runs aground with respect to North Dakota, where per capita income is a near equivalent of that in South Dakota, but, despite a lower urban-rural ratio and a lower rate of deaths per registered vehicle, the premium charged exceeds that charged in South Dakota.

The mystery grows when one considers that the experience of the National Bureau of Casualty Underwriters has led it to establish a rate of $26 for Sioux Falls, South Dakota, which had a 1950 population of 52,000, for insurance costing $10 more in Fargo, North Dakota, which in 1950 had a smaller population of 38,000. And, it should be noted that the difference in the rates applicable in Nebraska and North Dakota, which have different rules of law concerning contributory negligence, is less than the difference between Nebraska and South Dakota, which have the same rule.[65]

Thus chastened by an inability to supply a ready explanation for the variations in rates, an approach may be made to the statistics and rate data concerning those states believed to be desirable subjects for the purpose of this investigation.

CLAIM FREQUENCY

The first two columns of Table II present statistics based upon the claim experience of insurance carriers reporting to the National Bureau of Casualty Underwriters in states with comparative

[65] Thus, perhaps, lending support to the decision to forego detailed consideration of the effect of the Nebraska and South Dakota statutes.

TABLE II

CLAIM FREQUENCY AND COSTS

State	1954-1956[1] Bodily Injury Claim Frequency	1954-1956[2] Property Damage Claim Frequency	1954-1956[3] Deaths Per Reg. Auto	1954-1956[4] Bodily Injury Claims Per Death	1954-1956[4] Property Damage Claims Per Death	1950[5] Urban-Rural Population Ratio	1954-1956[6] Average Bodily Injury Claim Cost	1954-1956[7] Average Property Damage Claim Cost	1954-1956[8] Total Pure Premium
Alabama	(9) 18	(10) 75	3.11	(14) 5.79	(11) 24.12	(12) .78	(10) $765.	(11) $129.	(14) $23.06
*Arkansas**	(8A) 19	(8) 78	3.29	(15) 5.78	(13) 23.71	(15) .49	(11) 755.	(6) 135.	(12) 24.74
Florida	(7A) 20	(9A) 76	2.32	(7) 8.62	(8) 32.76	(3) 1.90	(2) 906.	(7) 134.	(7) 28.47
*Georgia**	(8B) 19	(9B) 76	3.24	(13) 5.86	(14) 23.46	(10) .83	(15) 738.	(4) 138.	(13) 24.64
Illinois	(1) 39	(2) 102	2.24	(1) 17.41	(4) 45.54	(1) 3.46	(8) 803.	(2) 144.	(1) 45.87
Iowa	(11) 15	(5A) 94	1.98	(10) 7.58	(3) 47.47	(9) .91	(12) 754.	(15) 108.	(16) 21.27
Louisiana	(4) 26	(7) 86	2.95	(6) 8.81	(9) 29.15	(6) 1.21	(13) 745.	(5) 137.	(5) 31.25
Michigan	(7B) 20	(1) 108	2.04	(5) 9.80	(2) 52.94	(2) 2.41	(16) 653.	(9) 131.	(8) 26.95
Minnesota	(6) 21	(6) 90	1.67	(3) 12.57	(1) 53.89	(7) 1.20	(4) 900.	(13) 118.	(6) 29.15
*Mississippi**	(8C) 19	(13) 65	3.45	(16) 5.51	(16) 18.84	(16) .39	(1) 939.	(3) 139.	(9) 26.65
Missouri	(2) 34	(3) 100	2.70	(2) 12.59	(6) 37.04	(4) 1.60	(7) 828.	(12) 127.	(2) 40.55
North Carolina	(10) 17	(12) 68	2.86	(12) 5.94	(12) 23.78	(14) .51	(14) 744.	(10) 130.	(15) 21.59
Oklahoma	(8D) 19	(11) 71	2.45	(9) 7.76	(10) 28.98	(8) 1.04	(5) 882.	(8) 133.	(10) 25.97
South Carolina	(8E) 19	(14) 60	3.14	(11) 6.05	(15) 19.11	(13) .58	(6) 832.	(1) 162.	(11) 25.49
Tennessee	(5) 23	(5B) 94	2.84	(8) 8.10	(7) 33.10	(11) .79	(3) 901.	(9) 131.	(4) 32.71
*Wisconsin**	(3) 27	(4) 99	2.40	(4) 11.25	(5) 41.25	(5) 1.37	(9) 800.	(14) 109.	(3) 32.73

* Italicized name indicates state has a comparative negligence rule.

[1] Number of claims per 1000 automobiles insured—National Bureau of Casualty Underwriters.

[2] Number of claims per 1000 automobiles insured—National Bureau of Casualty Underwriters.

[3] Based upon deaths by place of accident—WORLD ALMANAC, 1958, p. 309; WORLD ALMANAC, 1957, p. 367; and registrations of private and commercial privately-owned automobiles including taxis, but excluding trucks, busses, and publicly-owned vehicles—STATISTICAL ABSTRACT OF THE UNITED STATES, 1957, p. 554.

[4] For an explanation of the derivation of these ratios, see pp. 709-710 infra.

[5] STATISTICAL ABSTRACT OF THE UNITED STATES, 1957, p. 22.

[6] Average amount of losses per claim incurred with losses on a basic limits basis: Portions of losses in excess of $5,000 per claim and $10,000 per accident for bodily injury excluded—National Bureau of Casualty Underwriters.

[7] Amount of losses in excess of $5,000 for property damage excluded—National Bureau of Casualty Underwriters.

[8] Average amount of losses per insured car on basic limits basis—National Bureau of Casualty Underwriters.

negligence rules and their neighboring states. The states involved with comparative negligence rules are Arkansas, Georgia, Mississippi, and Wisconsin. Texas, though sharing a short common border with Arkansas has been omitted from the list, not in recognition of claims of sovereignty, but because its large size includes so much territory far away from and unlike Arkansas, with which it would otherwise be compared. In the first column of Table II the frequency of claims for personal injury per thousand automobiles insured is set out. In the second column, the frequency of claims for property damage per thousand automobiles insured is set out. In parentheses next to each frequency figure the relative rank of the state in claim frequency is set out.

Analysis of these statistics leads to no conclusion, unless it is that an effect of comparative negligence is not observable. Wisconsin, a comparative negligence state, does have a high bodily injury claim frequency which places it third in that list, and a high property damage claim frequency, which places it fourth in that list. However, Arkansas, Georgia, and Mississippi, other comparative negligence states, share a common frequency with Oklahoma and South Carolina, being tied for ranking of eighth in a field limited to eleven because of the number of instances in which states have the same frequency. With respect to property damage claim frequency, Arkansas, Georgia, and Mississippi rank eighth, ninth, and thirteenth, respectively, in a field enlarged to fourteen by fewer identical rates.

This great divergence in claim frequency between Wisconsin and the other comparative negligence states immediately suggests that analysis should proceed along more refined lines, with an attempt made to make adjustments for the difference in safety conditions and for what appears to be a difference between northern and southern states.

As mentioned above, the best indicator of safety conditions is that found in the reported death statistics of the various states.[66]

In the attempt to make an allowance for variation in safety conditions, the statistics of the number of deaths per thousand registered automobiles have been set out in third column of Table II. If the claim frequencies of either column one or column two are divided by the death frequency statistics of column three,

[66] Pp. 698-699 supra.

the result is a statistic indicating the frequency of that type of claim per death. Thus,

$$\frac{\text{Claims}}{\text{1,000 Insured Autos}} \div \frac{\text{Deaths}}{\text{1,000 Registered Autos}} = \frac{\text{Claims}}{\text{1,000 Insured Autos}} \times \frac{\text{1,000 Registered Autos}}{\text{Deaths}} = \frac{\text{Claims}}{\text{Deaths.}}$$

Taking deaths as the most satisfactory, though not the most accurate, indicator of safety conditions, this ratio of claims per death may be considered instead a ratio of claims per accident, and consequently an index of the claim propensity of residents of the various states.

Of course, even this simple calculation is based upon assumptions which are not true. The ratio of accidents to deaths is not constant throughout the nation, but as has already been pointed out there are fewer accidents per death in rural areas where the higher speed of the vehicles involved results in a higher proportion of fatalities in the accidents which do occur. The calculation also assumes what undoubtedly is not true, that there is a constant proportion of insured automobiles in the total of registered automobiles in the various states. Also assumed, but undoubtedly not the fact, is that ratio of privately-owned automobiles to other vehicles is constant throughout the states, and that privately-owned automobiles are involved in the same proportion of fatal accidents in all the states. Nevertheless, this rough adjustment for the variation in safety conditions would appear to provide a more reliable and accurate index of the claim propensities of residents of various states than is found in the original data on the frequency of claims per insured vehicle. These adjusted statistics of claim frequency are set out in columns four and five of Table II, with the relative rank of the state set out in parentheses next thereto.

Upon this basis Wisconsin drops in rank to fourth in the frequency of bodily injury claims and fifth in the frequency of property damage claims in a field of sixteen states. Mississippi drops to last place with respect to both types of claims; Arkansas takes fifteenth place in bodily injury claim frequency and thirteenth in property damage claim frequency; Georgia takes thirteenth place in bodily injury claim frequency and fourteenth in property damage claim frequency. Again no conclusion can be drawn, unless it is that the effect of comparative negligence does not appear after correction for differences in safety conditions.

The divergence between northern and southern states is broadened, however, by the correction made for variations in safety conditions. Many economic and social differences exist between northern and southern states which might account for this difference in claim consciousness of their residents. For example, it is possible that southern Negroes may forego pressing claims against white persons which they would press in a northern state. Another factor may be differences in the distribution of population between urban areas and rural areas. Persons living in urbanized areas might be expected to be more claim conscious than those living in rural areas, because of the combination of the sophistication resulting from newspaper publicity given litigation in larger cities and the hardening to life that may still be the product of the less comfortably developed rural areas.

An opportunity to test the effectiveness of this factor is provided by the statistics of the ratio of urban population to rural population found in column six of Table II. And, when the relative ranking of states in urban-rural ratio is compared with the relative ranking in frequencies of claims per death (or accident) a sufficient correlation is found to support the belief that this factor does affect claim consciousness. Thus four of the sixteen states have the same ranking with respect to bodily injury claim consciousness as they have with respect to the urban-rural population ratio. Only two of the states, Florida and Minnesota, have changed their relative ranking in such a comparison by as much as four places; three states, Georgia, Michigan, and Tennessee, changed their relative ranking by three places, and the remaining eight are within one or two places in rank on both lists. Turning to the correlation between property damage claim frequency per death (or accident) and urban-rural ratio, one notes that it is not as close. Three states do have exactly the same ranking in each list, but two states, Iowa and Minnesota, have a claim frequency rank six places higher than their ranking in the urban-rural ratio list; Florida has a claim frequency rank five places below its urban-rural ratio rank; and Georgia and Tennessee have moved four places from their urban-rural ratio rank. Nevertheless, the correlation in ranking indicates the presence of an operative relationship between urban-rural distribution of population and claim consciousness.

Table III presents a regional comparison of the claim frequency statistics developed in Table II. Once again it may be noted that there appears to be no relationship between claim frequency and

TABLE III

REGIONAL COMPARISONS OF CLAIM FREQUENCY AND COSTS

State	1954-1956 Bodily Injury Claims Per Death	1954-1956 Property Damage Claims Per Death	1954-1956 Average Bodily Injury Claim Cost	1954-1956 Average Property Damage Claim Cost	1954-1956 Total Pure Premium	1950 Urban-Rural Population Ratio
Arkansas	(5) 5.78	(5) 23.71	(5) $755.	(4) $135.	(6) $24.74	(5) .49
Louisiana	(2) 8.81	(3) 29.15	(6) 745.	(2) 137.	(3) 31.25	(2) 1.21
Mississippi	(6) 5.51	(6) 18.84	(1) 939.	(1) 139.	(4) 26.65	(6) .39
Missouri	(1) 12.59	(1) 37.04	(4) 828.	(6) 127.	(1) 40.55	(1) 1.60
Oklahoma	(4) 7.76	(4) 28.98	(3) 882.	(3) 133.	(5) 25.97	(3) 1.04
Tennessee	(3) 8.10	(2) 33.10	(2) 901.	(5) 131.	(2) 32.71	(4) .79
Georgia	(5) 5.86	(5) 23.46	(6) 738.	(2) 138.	(4) 24.64	(2) .83
Alabama	(6) 5.79	(3) 24.12	(4) 765.	(6) 129.	(5) 23.06	(4) .78
Florida	(1) 8.62	(2) 32.76	(1) 906.	(3) 134.	(2) 28.47	(1) 1.90
North Carolina	(4) 5.94	(4) 23.78	(5) 744.	(5) 130.	(6) 21.59	(6) .51
South Carolina	(3) 6.05	(6) 19.11	(3) 832.	(1) 162.	(3) 25.49	(5) .58
Tennessee	(2) 8.10	(1) 33.10	(2) 901.	(4) 131.	(1) 32.71	(3) .79
Mississippi	(5) 5.51	(5) 18.84	(1) 939.	(1) 139.	(3) 26.65	(5) .39
Alabama	(3) 5.79	(3) 24.12	(3) 765.	(5) 129.	(5) 23.06	(3) .78
Arkansas	(4) 5.78	(4) 23.71	(4) 755.	(3) 135.	(4) 24.74	(4) .49
Louisiana	(1) 8.81	(2) 29.15	(5) 745.	(2) 137.	(2) 31.25	(1) 1.21
Tennessee	(2) 8.10	(1) 33.10	(2) 901.	(4) 131.	(1) 32.71	(2) .79
Wisconsin	(3) 11.25	(5) 41.25	(3) 800.	(4) 109.	(2) 32.73	(3) 1.37
Illinois	(1) 17.41	(4) 45.54	(2) 803.	(1) 144.	(1) 45.87	(1) 3.46
Iowa	(5) 7.58	(3) 47.47	(4) 754.	(5) 108.	(5) 21.27	(5) .91
Michigan	(4) 9.80	(2) 52.94	(5) 653.	(2) 131.	(4) 26.95	(2) 2.41
Minnesota	(2) 12.57	(1) 53.89	(1) 900.	(3) 118.	(3) 29.15	(4) 1.20

comparative negligence, unless it is the unlikely one that comparative negligence discourages claims. Instead, there does appear the same rather positive correlation of claim frequency and urban-rural population except in the case of the Georgia grouping of states. In that grouping it may be noted that, except for Florida, there is very little difference in the urban-rural population ratio so that slight variations in that factor might not have an observable effect.

Explanations of the difference in the correlation of bodily claim frequency and property damage claim frequency statistics and the urban-rural population ratio might be advanced.[67] But the important thing for present purposes is not whether each state has received an exactly correct rating in the list of claim frequency statistics. It is instead that, after an adjustment for the differences in safety conditions, the statistics show a relationship between the

67 The claim frequency statistics used here have been developed from the number of traffic deaths which occurred in each state during the years 1954 through 1956. Almost one half of the traffic deaths occurring in urban areas involve collisions with pedestrians, whereas only eleven percent of the rural accidents involve collisions with pedestrians. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS — 1957, 48. Collisions with pedestrians are extremely unlikely to produce property damage claims, whereas other accidents, causing deaths, such as collisions of motor vehicles, collisions with fixed objects, trains, animals, and even running off the road, are likely to create property damage claims. Accordingly, the use of the death statistics in developing a claims ratio probably has a greater accuracy with respect to rural accidents than it does with urban accidents.

degree of urbanization and claim consciousness but fail to show any relationship between comparative negligence and claim consciousness.

This, of course, does not mean that there is no relationship between comparative negligence and claim consciousness. It means only that the relationship cannot be detected with the statistical techniques here used. Nor is any information obtained to answer the important question of how many claims filed with companies reach the state of litigation. The analysis does indicate, however, that the influence of comparative negligence on claims consciousness is not as great as the effect of a higher degree of urbanization, which can be detected in the statistics.

Insurance Costs

Claim frequency, with which we have thus far been concerned, depends principally upon the accident rate, the types of accidents which occur, and the claims consciousness of the community. In turn, claim frequency is only one of the factors which determines the ultimate level of liability insurance premiums. A more prosperous economy can afford expensive safety features in highway construction, thus reducing accidents. On the other hand, the economic level of the community will have an effect in terms of the amount which must be paid to compensate for the loss of wages, salaries, or other income caused by injuries. The economic level of the community will also affect the community judgment expressed in the jury verdict (or the estimate of the jury verdict reflected in a compromise settlement) of the value to be placed upon pain and suffering and physical disfigurement. The extent to which the law permits, or community sentiment accords with, the award of punitive damages in service of the admonitory function of tort law is probably a factor affecting rates. Other social factors may affect community sympathy for an injured party and the community opinion of what injuries should be considered compensable and which injuries must be accepted with resignation in the same way that beauty, brains, and wealthy ancestors, or the lack thereof, must be accepted. And, while instructions to the jury may correct some misapprehensions of jurors about what matters are compensable and which are not, their latitude in determining the value to be placed on such intangibles will produce variation with respect not only to judgments entered on verdicts but with the negotiated settlements.

Obviously many of these factors cannot be reduced to measurable quanta which can be the basis of comparison between states. For others some statistical data may exist. But the interaction of all the factors would seem to be too complicated to allow the use of a formula for accurate prediction of the rate level. To the extent that the social intangibles are a constant within a region of this country, comparisons of one state with its adjacent neighbors may be made without distortion. Tables IV-A, IV-B, IV-C, and IV-D present such comparisons of four comparative negligence states with their neighbors, with the various statistics set in columns depending upon whether they are higher, lower, or the same as that of the comparative negligence state.

TABLE IV

A. ARKANSAS

Remainder of State Comparison

Arkansas Figures: $38.08—♯7.5—%6.9—&1.9—*777—§25.08—@28.6—I1071—D/R3.29—U/R.49.

Neighboring State Rate Is:	Higher	Lower	Same
Louisiana	$47.78—♯7.6—%7.5—&3.0—*798—§36.99—I1344—U/R1.21	@26.9—D/R2.95	
Mississippi	$39.00—%8.1—*968—§27.20—@29.6—D/R3.45	♯6.3—I957—U/R.39	&1.9
Missouri	$57.80—♯7.7—&2.8—*1030—§40.09—@71.1—I1786—U/R1.60	%6.2—D/R2.70	
Oklahoma	$38.66—*837—I1499—U/R1.04	♯6.1—%6.2—&1.8—§24.08—@27.7—D/R2.45	
Tennessee	$39.79—♯8.2—%8.0—&2.0—*975—§30.90—I1264—U/R.79	@23.6—D/R2.84	

B. GEORGIA

Remainder of State Comparison

Georgia Figures: $37.00—♯6.5—%8.2—&1.9—*766—§24.82—@23.7—I1338—D/R3.24—U/R.83.

Neighboring State Rate Is:	Higher	Lower	Same
Alabama	$37.30—♯6.8—%8.6—*776—@25.1	&1.8—§24.05—I1185—D/R3.11—U/R.78	
Florida	*860—@37.1—I1666—U/R1.90	$32.63—♯6.4—%6.6—&1.8—§24.48—D/R2.32	
North Carolina		$30.50—♯6.4—%7.7—*759—§23.66—@21.5—I1254—D/R2.86—U/R.51	&1.9
South Carolina	%9.4—*813—§25.34	$34.60—♯5.5—@17.6—I1117—D/R3.14—U/R.58	&1.9
Tennessee	$39.79—♯8.2—&2.0—*975—§30.90	%8.0—@23.6—I1264—D/R2.84—U/R.79	

C. MISSISSIPPI

Remainder of State Comparison

Mississippi Figures: $39.00—♯6.3—%8.1—&1.9—*968—§27.20—@29.6—I957—D/R3.45—U/R.39.

Neighboring State Rate Is:	Higher	Lower	Same
Alabama	♯6.8—%8.6—I1185—U/R.78	$37.30—&1.8—*776—§24.05—@25.1—D/R3.11	
Arkansas	♯7.5—I1071—U/R.49	$38.08—%6.9—*777—§25.08—@28.6—D/R3.29	&1.9
Louisiana	$47.78—♯7.6—&3.0—§36.99—I1344—U/R1.21	%7.5—*798—@26.9—D/R2.95	
Tennessee	$39.79—♯8.2—&2.0—*975—§30.90—I1264—U/R.79	%8.0—@23.6—D/R2.84	

D. WISCONSIN

Remainder of State Comparison

Wisconsin Figures: $40.56—♯7.4—%7.0—&2.3—*911—§29.93—@52.6—I1760—D/R2.40—U/R1.37.

Neighboring State Rate Is:	Higher	Lower	Same
Illinois	♯8.4—§30.35—@89.8—I2243—U/R3.46	$34.38—%6.8—&2.1—*869—D/R2.24	
Iowa	♯7.8	$28.31—%5.5—&1.4—*856—§21.55—@45.4—I1580—D/R1.98—U/R.91.	
Michigan	♯9.8—%7.1—I2132—U/R2.41	$37.18—&2.0—*697—§27.26—@36.0—D/R2.04	
Minnesota	*972—@88.7	$37.00—♯7.2—%4.8—&1.8—§26.27—I1675—D/R1.67—U/R1.20	

Code:
$—Remainder of State Premium, adjusted to July 1, 1958.
♯—1955-1957 Property Damage Claim Frequency. Letter of National Bureau of Casualty Underwriters Sept. 10, 1959.
%—1955 Mileage Death Rate. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS—1957, 56.
&—1955-1957 Bodily Injury Claim Frequency. Letter of National Bureau of Casualty Underwriters, Sept. 10, 1959.
*—1955-1957 Bodily Injury Average Claim Cost. Letter of National Bureau of Casualty Underwriters, Sept. 10, 1959.
§—1955-1957 Total Pure Premium. Letter of National Bureau of Casualty Underwriters, Sept. 10, 1959.
@—Percentage of Policies Providing Bodily Injury Liability Coverage over $10,000/$20,000. Letter of National Bureau of Casualty Underwriters, Nov. 7, 1958.
I—Annual Per Capita Income (1955). WORLD ALMANAC, 1958, p. 752.
D/R—Deaths Per Registered Auto. See Table II.
U/R—Urban-Rural Population Ratio. See Table II.

The premium rate set out in the table is the combined rate for the basic Class I-A bodily injury and property damage coverage set by the National Bureau of Casualty Underwriters.[68] The rates are for the catch-all territories denominated "remainder of state."[69] They have been adjusted to a hypothetical rate effective as of July 1, 1958, to avoid the differentials that would otherwise be present in rates which became effective upon widely separated dates. The statistics on claim frequency, average claim cost, and pure premium are, however, based upon data covering all classes of insurance for the remainder of state territories, for the simple

[68] This class consists of privately-owned automobiles, driven for pleasure, and not used for transportation to or from work, for which there is neither a male owner nor driver under the age of 25. The limits of coverage are, for bodily injury, not in excess of $5,000 to any individual nor more than $10,000 for any one accident, and, for property damage, not in excess of $5,000 for any accident.

[69] As mentioned above, these territories generally include rural and small city areas which do not have sufficiently distinctive characteristics to merit treatment as separate territories. They probably present the best opportunity for comparison because differences in the accident rate caused by density of population, volume of traffic, and varying degrees of municipal law enforcement, as well as the amount of claims consciousness created by particular news editorial policies, are minimized.

In the cases of Mississippi and Oklahoma the bureau now has no remainder of state territory. For those states the rates used are rates applicable in territories covering large rural areas such as those usually classified as remainder of state. Of course, a search for correlation between "remainder of state" rates and other statistics which are based upon the entire experience of the state proceeds upon the assumption that the insurance experience in these specially defined areas may properly be compared with other experience data accumulated on a statewide basis. Undoubtedly some distortion results.

reason that this is the only form in which it was available. The sources for other data are set out in the tables, which include some of the data from Table II.

The first impression produced by examination of the tables is that variations in level of liability insurance premiums are accompanied by changes in the cluster of variable factors which might be expected to influence the rates, but no fixed relationship between rates and any one of the factors can be observed. Thus, there is a correlation between higher insurance rates and a higher mileage death rate in only ten of the eighteen comparisons. The correlation between higher insurance rates and the statewide death rate per registered automobile is the same, with an affirmative relation existing in ten of the eighteen comparisons. On the other hand, there is a substantial correlation between the frequency of claims per insured vehicle and the level of rates, there being twelve instances in the eighteen comparisons in which a higher frequency for bodily injury claims is accompanied by higher premium rates, and eleven instances of such correlation with respect to property damage claim frequency. The total pure premium figures, which represent the average amount of losses per insured car, have the highest correlation with insurance premium levels, there being an affirmative relationship in fourteen of the eighteen comparisons. The correlation between per capita income and insurance premiums is weaker, there being an affirmative correlation in only ten of the eighteen comparisons, suggesting the possibility that the higher economic losses in states with high per capita income is partially offset by the improvement in safety conditions which a higher economic level is capable of creating. The same weak correlation exists with respect to the urban-rural population ratio but this is not so puzzling since the rates compared are for the territories "remainder of state," which generally are rural or less developed parts of the state and hence less affected by the overall degree of urbanization.

If a comparison of the rates alone is made, as presented in Table V, it will be noticed that there is an equal division of instances in which the rates applicable in states with one rule exceed the rates applicable in states with another rule. In eight instances the rate of a state with a comparative negligence rule is higher than the rate of a neighboring state with a contributory negligence rule and in eight instances the rate of the state with a comparative

TABLE V

PREMIUM RATES IN COMPARATIVE NEGLIGENCE STATES ARE:

State	Higher	Lower	State	Higher	Lower
Arkansas			*Mississippi*		
Louisiana	.....	$ 9.70	Alabama	$ 1.70	.....
Mississippi	.....	.92	Arkansas	.92	.....
Missouri	.....	19.72	Louisiana	.....	$8.78
Oklahoma	.....	.58	Tennessee	.....	.79
Tennessee	.....	1.71			
			Wisconsin		
Georgia			Illinois	6.18	.....
Alabama	.....	.30	Iowa	12.25	.....
Florida	$ 4.37	.....	Michigan	3.38	.....
North Carolina	6.50	.....	Minnesota	3.56	.....
South Carolina	2.40	.....			
Tennessee	.....	2.79	AVERAGE DIFFERENCE (Eliminating Arkansas-Mississippi Comparison)	5.04	5.55

negligence rule is lower.[70] The average amount of the excess in those comparisons in which the rates for comparative negligence states exceed the average rate for contributory negligence states is $5.04, which is 13.3 percent of the average rate for those twelve states with contributory negligence rules in the group compared. The average amount of the difference in those comparisons in which the rates for comparative negligence states are lower is $5.55, which is 14.6 percent of the average rate in the states with contributory negligence rules.[71] It should also be noted that four of the comparisons in which rates in comparative negligence states are higher involve Wisconsin, and that four of the comparisons in which rates of comparative negligence states are lower involve Arkansas.

This near equality of comparison of rates gives a superficial basis for a conclusion that comparative negligence has had no effect upon the insurance premium rates. However, this absolute equality of comparison in a field so small may be attributed to chance, such as peculiar and particular conditions prevailing in either Wisconsin or Arkansas, and therefore has little statistical significance. It may be noted, however, by reference to Tables IV-A,B,C, and D, that in every case in which the comparative negligence state had a higher premium rate than its neighbors, it also had a higher rate of deaths per registered vehicle, or a higher

[70] The number of possible comparisons of states on this basis is smaller than was possible for other statistical measures, because Arkansas and Mississippi, which both have comparative negligence rules, have common borders, but cannot be so compared.

[71] This average difference has been distorted by the great difference between the rate applicable in Arkansas and the rate applicable in Missouri.

accident rate.[72] And, two of the comparisons in which the comparative negligence state rates are substantially lower involve comparisons of Arkansas with its wealthier and more highly urbanized neighbors, Missouri and Louisiana. The other instance in which the comparative negligence state rate is substantially lower involves a comparison of Mississippi with the wealthier and more highly urbanized state of Louisiana.

The result of this rather tedious analysis of rates and other statistics is that nothing conclusive appears. While there is no preponderance of higher rates in states with comparative negligence rates, the field is not large enough to permit a statement that there is no effect. But if there is any effect, it certainly is not strong enough to be noted in the sixteen comparisons made.

The Arkansas Experience

As mentioned above, Arkansas adopted the principle of comparative negligence in June 1955. In 1957 the formulation of the principle was changed from the "pure" comparative negligence standard of 1955 to the more limited form in which recovery is allowed only where plaintiff's negligence is less than that of the defendant. Despite this change, the state has, for more than four years, been governed by a standard allowing recovery by one whose negligence was a contributing cause of his injuries. Accordingly, it furnishes working laboratory experiment on the effect of comparative negligence upon liability insurance premiums. If comparative negligence does produce increased premium rates for liability insurance one would expect the rate of increase of rates in Arkansas to be greater than that which has occurred in neighboring states.

Some obstacles exist to the making of such a comparison. Changes in insurance rates become effective in different states with varying frequencies and upon different dates. For example, the most recent of four increases in Class I-A rates for Arkansas since February 1955 became effective on December 10, 1958, whereas the most recent increase in the comparable rates in Oklahoma since November 1955 became effective in October 1957. Moreover, since the initial level of the rates differed in the two states, a dollar and cents increase comparison would be misleading

72 Thus supporting the proposition that comparative negligence causes carelessness and increases accidents — and at the same time furnishing an example of how statistical support may be found for almost any preconceived notion.

as to the rate of increase. An adjustment may be made, however, for both these factors by converting the increase between the 1955 rate and the present rate into a percentage increase for the period, and then reducing that increase to a monthly rate of increase which is subject to comparison.

Another difficulty is caused by the number of rate territories and territorial groupings in the various states. Because each state has several territories, there are different and varying monthly rates of increase within each state. Moreover, during the four-year period territorial groupings have been broken up, and in 1959 several rate structures existed in some states for an area formerly covered by one rate structure. To some extent it appears that these new territorial groupings have been established for areas in which the greatest change in loss experience has occurred and that the highest monthly rate of change is associated with these new territories. Accordingly, care must be taken to avoid distortion from these figures.

Use of percentage increases by territorial groupings may be misleading as to the extent to which rates have increased in the state as a whole. For example, two states may each have four territorial groupings. In State *A,* the percentage increases in the four territories may have been 10%, 15%, 15%, and 20%, respectively. In State *B,* the rates of increase during the same period might have been 20%, 5%, 10%, and 10%, respectively. One who took an unweighted average of the percentage increases would conclude that there had been a greater increase in State *A* than in State *B*. However, if half of the insured vehicles in each state are located in the first territorial grouping and only one tenth of the insured vehicles are located in the fourth grouping, the increase has been greater in State *B* than in State *A*. In the absence of some statistical adjustment or weighting of averages (and there is none in the computations which follow) this possibility of inaccuracy inheres in the analysis.

The system used by the National Bureau of Casualty Underwriters divides Arkansas into four territories and three territorial groupings. Territory one consists of all Pulaski County, in which the city of Little Rock is located. Territory two covers the Fort Smith area on the border of Arkansas and Oklahoma. Territory three consists of all of certain northeastern counties bordering on Tennessee and hence close to Memphis. Territory four is the remainder of state territory. For purposes of rate structure at the

TABLE VI

AVERAGE MONTHLY PERCENTAGE INCREASE IN CLASS 1-A COMBINED BODILY INJURY AND PROPERTY DAMAGE PREMIUM RATES IN ARKANSAS AND SURROUNDING STATES, 1955-1959

Territories

State	1	2	3	4	5	6	7	8
Arkansas	.8260%	1.9782%	.8260%	.....	.....	.....	.....	.....
Missouri	1.5227	1.4318	.0000	1.2272%	1.5909%	1.5909%	2.3409%	2.3809%
Oklahoma	1.5652	.9565	1.3913	1.3913	1.3913	1.7826	.....	.....
Louisiana	.3939	1.6363	—.0909	.2727	.7878	1.3030	.2142	2.5000
Mississippi	1.0540	.1351	.7027	1.3513	.7027	.....	.....	.....
Tennessee	.5744	.1489	.4255	.1063	.4468	.8723	.4468	.....

present time, the bureau groups territory three and territory four together. The states of Louisiana, Mississippi, Missouri, Oklahoma, and Tennessee, which surround Arkansas, now have thirty-four different territorial groupings.

A tabulation of the monthly percentage increases in the Class I-A liability insurance rates set by the bureau for each of these territorial groupings is presented in Table VI. The same data are recast in graphic form for visual presentation in Table VII. The unweighted average of the monthly percentage increase for all of the 37 territorial groupings is 1.03 percent[73] whereas the monthly percentage increase in two of the Arkansas territorial groupings was .83 percent and for the other, the Fort Smith territory, the monthly percentage increase was 1.98 percent. The median of the monthly percentage increases, which is less affected by the extremely high percentage increases applicable to certain new territorial groupings,[74] is .96 percent.

Certainly in these statistics there rests no proof that comparative negligence results in higher liability insurance premium rates. Two of the territorial groupings, which cover most of the states and most of the insured vehicles in Arkansas, have a rate of increase below both the average and the median of the rate of increase which occurred in the other territorial groupings. One, the Fort Smith territory, located on the Oklahoma boundary, is very substantially above both the average and the median. For present purposes this is illuminating, since the residents of Fort Smith probably do a substantial amount of driving in Oklahoma and accordingly have accidents where the contributory negli-

[73] If the percentage increases in the seven territorial groupings in Texas are utilized in making the comparisons the unweighted average monthly percentage increase becomes instead .91%.

[74] If the percentage increases in the seven territorial groupings in Texas are utilized in making the comparisons the median increase drops to .79%.

TABLE VII

AVERAGE MONTHLY INCREASE IN CLASS 1-A COMBINED BODILY INJURY AND PROPERTY DAMAGE PREMIUM RATES FOR ARKANSAS AND SURROUNDING STATES DURING 1955-1959

Terr. Groups	—.1%	0%	.1%	.2%	.3%	.4%	.5%	.6%	.7%	.8%	.9%	1.0%	1.1%	1.2%	1.3%	1.4%	1.5%	1.6%	1.7%	1.8%	1.9%	2.0%	2.1%	2.2%	2.3%	2.4%	2.5%
5																											
4																											
3																											
2																											
1																											

Note. Average monthly increases for Arkansas territorial groupings are indicated by diagonal lines.

gence rule still prevails. Presence of this bar to recovery, which would be recognized in Arkansas under the usual rule applicable to such a conflict of laws situation,[75] would be expected to mitigate the increases in rates attributable to the change in Arkansas law if the legal effect given contributory negligence is a significant factor in this respect. Instead, the substantial increase in the Fort Smith rates appears to be caused by setting the dollar amount of those rates on a par with the other territorial groupings.

Of course, these statistics do not prove that comparative negligence does not affect the level of liability insurance premium rates.[76] Without enactment of the comparative negligence statutes Arkansas might have had a lower rate of increase, comparable, for example, with that of Tennessee. However, it is possible to say once again that if comparative negligence does affect insurance rates, its effect is not great enough to be observable in the complex of forces acting on the rate level. It is not, for example, anywhere near as strong as whatever peculiar local developments led to very high increase rates in new territorial groupings in Louisiana and Missouri.

Geographical Distribution of Rate Territories

Under the usual conflicts rule the law of the place of the tort determines the applicability of the defense of contributory negligence.[77] According to available statistics nonresident drivers are involved in a substantial number of accidents.[78] If the presence

[75] Powell Bros. Truck Lines v. Barnett, 194 Ark. 769, 109 S.W. (2d) 673 (1937); Missouri P. R. Co. v. Miller, 184 Ark. 61, 41 S.W. (2d) 971 (1931); St. Louis-S.F. R. Co. v. Rogers, 172 Ark. 508, 290 S.W. 74 (1927); St. Louis, I.M. and S. R. Co. v. McNamare, 91 Ark. 515, 122 S.W. 102 (1909); LEFLAR, CONFLICT OF LAWS 222 (1959).

[76] Cf. Professor Rosenberg's findings that the Arkansas statute did alter the value of personal injury claims for the purposes of settlement, and increased the proportion of verdicts won by plaintiffs, though it did not increase the size of verdicts. Rosenberg, "Comparative Negligence in Arkansas: A 'Before and After' Survey," 13 ARK. L. REV. 89 at 103-105 (1959).

[77] CONFLICT OF LAWS RESTATEMENT §385 (1934). The usual conflict rule is applied in *Arkansas,* cases cited note 75 supra. *Georgia,* Craven v. Brighton Mills, 87 Ga. App. 126, 73 S.E. (2d) 248 (1952), and *Mississippi,* Tri-State Transit Co. v. Mondy, 194 Miss. 714, 12 S. (2d) 920 (1943); and apparently would be applied in *Wisconsin.* See Haumschild v. Continental Cas. Co., 7 Wis. (2d) 130, 95 N.W. (2d) 814 (1959). But cf. Bourestom v. Bourestom, 231 Wis. 666, 285 N.W. 426 (1939) (overruled on another issue in Haumschild v. Continental Cas. Co., supra).

[78] During 1956, 16% of all fatal accidents and 9% of all accidents involved drivers who were not residents of the state in which the accident occurred. During the same year, 35% of all fatal accidents and 27% of all accidents involved drivers residing more than 25 miles from the place of the accident. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS — 1957, 53.

or absence of a complete defense in contributory negligence is a substantial factor in producing higher liability insurance rates one would hypothesize that residents living near the borders of states with comparative negligence rules would have a loss experience different from those living in the center of the state. Thus, drivers in states with comparative negligence who live near the borders of those states would have lower rates than otherwise comparable drivers in the center of those states. Likewise, drivers in neighboring states with contributory negligence rules who live near the border of a state with comparative negligence would have higher rates than otherwise comparable drivers living at a distance from that border.

The rate data of the National Bureau of Casualty Underwriters unfortunately does not make it possible to make a general test of this hypothesis. There is no general delineation of rate territorial boundaries in either category of states which indicates concern on the part of insurance actuaries for the probability of travel in neighboring states. Of course, this indicates more than lack of actuarial concern with comparative negligence; it indicates lack of concern with all difference in rules of law and, indeed, a lack of concern for a state-by-state consideration of the many other variables affecting insurance rates. It is also a reminder that the actuarial process by which rates are established is not so precise and delicate as to reflect separately the influences of the many factors thought to affect rate structures. Indeed, the insurance principle, requiring a sharing of generalized risks, precludes an overly refined system which would subject small groups or individuals to paying the costs of their particular experience.

There do exist, however, a few instances in which territorial boundaries have been drawn so as to make it possible to test this hypothesis. As previously mentioned, the Fort Smith territory in Arkansas is located on the border of Oklahoma. The bureau's class I-A liability rates for that territory were raised in 1956 to the same level as those for all other territories in Arkansas. Thus, proximity to Oklahoma and resultant driving under its laws have not been reflected in reduced rates for this border city.

Certain cities in Georgia, with comparable populations[79] each of which constitutes a separate territory for the purposes of ac-

[79] In 1950 the population of the cities was as follows: Augusta—71,508; Columbus—79,611; Macon—70,252. THE WORLD ALMANAC 1958, 273.

cumulation of loss experience, provide another opportunity for a test. Augusta, Georgia is located on the border of South Carolina. Columbus, Georgia is located on the border of Alabama. Macon, Georgia is located in the middle of the state. Contrary to the hypothesis all three cities have the same bureau class I-A liability rates. In neighboring Alabama, the bureau has established the same rate for Montgomery, located in the center of the state, as that applicable to somewhat larger Mobile, which is approximately 20 miles from the Mississippi border. Six counties in a territory of South Carolina are located on the border of Georgia, yet they have the same rates as the remainder of the state. One bureau territory in Mississippi consists of a long narrow string of counties running the length of the Mississippi River, and hence a territorial grouping on the boundary with Arkansas and Louisiana. It has the same rate structure as another territory which covers most of the state.

In northern Wisconsin, LaCrosse, located on the border of Minnesota, is classified with and has the same rates as the more centrally located cities of Fond Du Lac, Green Bay, Madison, Oshkosh and Sheboygan. Beloit, located on the Illinois border, is classified with the more centrally located cities of Appleton, Chippewa Falls, Eau Claire, Waukesha, and Wausau. On the other hand, the northern counties of Wisconsin which border on the Upper Peninsula of Michigan have the lowest Class I-A rates in the state, suggesting that here the contributory negligence rule of Michigan has had an effect. This conclusion is dispelled when one notes that the counties of the Upper Peninsula of Michigan bordering on Wisconsin also have the lowest rates in Michigan, suggesting that level of the rates in comparison with the other portions of both states is caused more by similar economic, climatic, and social conditions than by differences in the treatment accorded contributory negligence. However, some factor dependent upon state boundaries, whether it is the regulation of the insurance industry, the Wisconsin joinder rule[80] or some

[80] The Wisconsin courts will not permit direct action against an insurance company on a policy with a "no action" clause (i.e., no action may be maintained against the insurance company until liability of the insured has been established by judgment) valid in the state in which it was issued. Ritterbusch v. Sexmith, 256 Wis. 507, 41 N.W. (2d) 611 (1950). See MacDonald, "Direct Action Against Liability Insurance Companies," 1957 WIS. L. REV. 612 at 616-617. Accordingly, even in an action brought in Wisconsin the insurer of a Michigan resident could not be joined as a party defendant if the policy contained such a clause, which is apparently valid in Michigan, but subject to waiver. Cf. Kipkey v. Casualty Assn. of America, 255 Mich. 408, 238 N.W. 239 (1931); Barney v. Preferred Automobile Ins. Exchange, 240 Mich. 199, 215 N.W. 372 (1927). On the other

other legal factor is apparent in the difference between the $27 rate charged for the basic Class I-A coverage in the Michigan counties and the $40 rate charged in neighboring Wisconsin counties.

Once again analysis of the data does not permit an affirmative statement that comparative negligence does or does not affect liability insurance rate levels. This indefiniteness of the data might be due to the fact that the proportion of accidents involving nonresident drivers, though ranging from 9 to 16 percent on a statewide basis and undoubtedly higher near state boundaries,[81] is not sufficient to make the effect of comparative negligence apparent in loss experience. The general lack of concern of the actuaries for proximity to state borders is consistent with this conclusion. However, while the possibility remains of an undetected effect of comparative negligence on the level of rates, this analysis of geographical distribution of territories indicates that its possible force is not sufficient to be observable.

Miscellaneous Indicators

Another indication of lack of concern on the part of insurance actuaries for the differences between comparative negligence and contributory negligence rules may be found in the practice used to determine the premium rate charged for coverage in excess of the basic limits of $5,000 per person and $10,000 per accident for bodily injury coverage and $5,000 for property damage. It is sometimes argued that comparative negligence would encourage the filing of nuisance claims and would result in award of reduced damages to plaintiffs totally at fault out of sympathy for their handicapped condition.[82] Accordingly, one would expect the losses within the basic limits to be higher in states with comparative negligence rules than it is in states following the rule that contributory negligence is a complete bar to re-

hand, it is clear that the insurance company could not be sued in a direct action in Michigan, Lieberthal v. Glens Falls Indemnity Company, 316 Mich. 37, 24 N.W. (2d) 547 (1946). Accordingly, the difference in the results due to the rules relating to joinder might be apparent in the rates, despite a substantial amount of travel across the border by residents of both states.

81 Note 78 supra.

82 E.g., Benson, "Comparative Negligence — Boon or Bane," 26 INS. COUNSEL J. 204 at 207 (1956); Gilmore, "Comparative Negligence from a Viewpoint of Casualty Insurance," 10 ARK. L. REV. 82 at 83 (1955); Lipscomb, "Comparative Negligence," 1951 INS. L.J. 667; Powell, "Contributory Negligence: A Necessary Check on the American Jury," 43 A.B.A.J. 1005 at 1007 (1957).

covery. Since the increase in premiums for extended coverage is computed as a percentage of the basic $5,000/$10,000 coverage policy, one would expect different percentage factors to be used in states with comparative negligence rules. However, the same factors are used for all states to determine the premiums for increased limits, with the exception of Louisiana and Oklahoma where somewhat higher factors are applicable.[83]

Another indication that comparative negligence has not affected the proportionate distribution of small and large claims may be found in the statistics of average claim costs presented in Tables II and III, where no marked correlation between comparative negligence and ranking in size of average claim appears. On the other hand, reference to Table IV-A, B, C, and D will disclose that in only five comparisons between comparative negligence states and contributory negligence states did a higher proportion of the residents of states with contributory negligence rules carry insurance with higher coverage limits than the residents of comparative negligence states. Or to put in the other way, in eleven comparisons, a higher proportion of residents in comparative negligence states carried insurance with higher coverage limits than did residents in neighboring states with contributory negligence. From this one might conclude that the residents of comparative negligence states have been made more protection minded, but their concern does not appear to be with the smaller claims which comparative negligence is said to promote.

CONCLUSION

Certainly this analysis of insurance data and other statistical information has produced no definite or precise measure of the effect of comparative negligence on automobile liability insurance. The effect of some factors, such as safety conditions or the death rate and the urban-rural population ratio can be detected. Generally speaking, however, it must be said that no effect from comparative negligence appears in the data. Teachers of tort law who each year must instruct their first-year classes on the effect of contributory negligence upon recoveries—and their classes consist of college-educated students who certainly possess a sophistication much above that of the general public—may find nothing surprising in the indications that comparative negligence has no effect upon the claims consciousness of the general

[83] Letter from the National Bureau of Casualty Underwriters, November 5, 1958.

public. A total lack of effect would be consistent with the view that despite the legal bar of contributory negligence, comparative negligence is in fact practiced in all states, by insurance adjusters,[84] defense and plaintiffs' attorneys, juries,[85] and even judges.[86] If this is true, one would expect no effect on the general level of rates. Instead, in only a limited number of cases, in which juries literally applied the contributory negligence bar or dealt freely with one totally at fault in producing his injuries, would a different result occur with a different rule of law. The choice then between the two rules would not be one involving a question of

84 One manual for casualty insurance adjusters contains the following advice:

"Since our first and most important defense is that of contributory negligence, I think that this is the proper time to warn the new claims man that although he must know the law as related to his work, he must be just as careful to avoid giving it too much weight when it comes to settling claims. Take the law seriously, but don't become wedded to it. As the new man gains in experience, he will learn much to his chagrin that some juries do not give proper consideration to theoretically valid defenses.

". . . Theoretically, the percentage of negligence with which the plaintiff can be charged is immaterial in defeating his right of action, in cases where this defense is proper. In other words, according to the law, even if his own contributory negligence was only 10 per cent of all the negligence in the accident, this would be sufficient to bar his recovery. In practice, however, the theory is rarely applied so stringently." MAGARICK, SUCCESSFUL HANDLING OF CASUALTY CLAIMS 17-18 (1955). See also id. at 271-272; GORTON, AUTOMOBILE CLAIM PRACTICE 92, 145 (1940). But cf. id. at 158-159.

85 Benson, "Comparative Negligence—Boon or Bane," 26 INS. COUNSEL J. 204 at 205, 211 (1956); Bress, "Comparative Negligence: Let Us Hearken to the Call of Progress," 43 A.B.A.J. 127 at 128 (1957); Harkavey, "Comparative Negligence—The Reflections of a Skeptic," 43 A.B.A.J. 1115 at 1116-1117 (1957); Powell, "Contributory Negligence, A Necessary Check on the American Jury," 43 A.B.A.J. 1005 at 1006 (1957); Tooze, "Contributary vs. Comparative Negligence—A Judge Expresses His Views," 12 NACCA L.J. 211 at 212 (1953); ULMAN, A JUDGE TAKES THE STAND 31-32 (1936).

86 For an example of judicial approval, or at least condonation, of compromise verdicts limiting the damages awarded a plaintiff whose contributory negligence was believed by the jury to be a cause of his injuries, even though the legal rule would require a complete bar, see Karcesky v. Laria, 382 Pa. 227 at 234, 114 A. (2d) 150 (1955). The court there said, "The doctrine of comparative negligence, or degrees of negligence, is not recognized by the Courts of Pennsylvania, but as a practical matter they are frequently taken into consideration by a jury. The net result, as every trial judge knows, is that in a large majority of negligence cases where the evidence of negligence is not clear, or where the question of contributory negligence is not free from doubt, the jury brings in a compromise verdict.

". . . In the instant case twelve reasonable men could have serious doubt as to whether Laria was negligent; and if Laria was negligent, whether the accident was caused by his negligence or by the contributory negligence of the plaintiffs or partly by the negligence of each of them. Under such circumstances, a jury usually does what this jury did, namely render a compromise verdict which is much smaller in amount than they would have awarded (a) if defendant's negligence was clear, and (b) if they were convinced that plaintiffs were free from contributory negligence.

"Where the evidence of negligence or contributory negligence, or both is conflicting or not free from doubt, a trial judge has the power to uphold the time-honored right of a jury to render a compromise verdict, and to sustain a verdict which is substantial—a capricious verdict or one against the weight of the evidence or against the law, can and should always be corrected by the Court."

substantially higher insurance rates for everyone, but a question of the justness of results in a limited number of cases.

It is possible that comparative negligence has an effect upon insurance rates, but that that effect cannot be detected with the data on hand and the techniques used. Even if this is true, however, some measure of its force has been obtained. Adoption of a comparative negligence rule, as shown by the Arkansas experience, would not have a catastrophic result upon the insurance rate structure of any state. Indeed, it would not have as much effect as rapid growth of population, increased urbanization, or change to a traffic program with the effective safety record of a neighboring state. Its effect, if any, would probably go undetected in the rates and statistics of the insurance industry.