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Automobile Accident Costs and Payments: Studies in the Economics of Injury Reparation

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Automobile Accident Costs and Payments

STUDIES IN
THE ECONOMICS OF INJURY REPARATION

A report of research conducted by the Law School and the Survey Research Center of the University of Michigan, with the financial assistance of the William W. Cook Endowment for Legal Research, and the Walter E. Meyer Research Institute of Law, Inc.

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With contributions from Herbert Bernstein (Germany), Danièle Durin (France), Jan Hellner (Sweden), and Harry Street (England)

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In recognition of the loyalty with which they endured our devotion to this too long-lived project, the coauthors lovingly dedicate this work to

OUR WIVES

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Introduction

A. WHAT THE STUDY SHOWS

This report is like a map of an unknown, or a little-known, country. It is a sketch of the principal contours of that area of human activity, aspiration, and conflict which is concerned with the reparation of personal injuries.

Like a map, it does not tell what should be done about the country portrayed—whether it should be embraced, repelled, or reformed. It does not even tell which facts are most “crucial” for that decision. Each statesman will have his own opinion about these questions.

The report is presented as a pool of data which will serve many purposes. First of all, the report furnishes a perspective on the largeness and the smallness of the reparation process, and of its many parts. Second, the report supplies much more specific information than has ever before been available on many points, such as the high or low level of reparation in relation to losses; the number of people who get paid, and those who receive nothing; the levels of legal expense, including attorneys’ fees. Third, it will furnish a guide for future research directed to narrower questions, by disclosing what are the kinds and approximate dimensions of the phenomena which call for further examination.

In order to suggest what sorts of information the report contains, and what conclusions may be drawn from it, a few of its findings are sketched in the following paragraphs. These findings have been selected from among many others as the ones most likely to be meaningful in the eyes of readers of many different kinds. Most of this summary relates to the survey of Michigan automobile accidents, which forms the major portion of this study.

1. *How Much Do Injury Victims Lose?*

Police have for years collected statistics on fatalities and injuries from automobile accidents. These are based on appearances at the scene of the accident, before any medical examination has taken place. The results are recorded in terms such as "serious or possibly serious," "slight shock and contusions," or "shaken up."

Partly because measures of the seriousness of injury are elusive, and partly because this study was directed toward money payments, estimates were made of the amounts of economic loss suffered by Michigan automobile accident victims. These estimates show dramatically how many of the accidental injuries involved very minor economic loss, and how very few, relatively, involved personal economic disaster.

The total number of persons who sustained *some* economic loss in a personal injury accident in the survey year was over eighty thousand—about one for every hundred Michigan residents. All these were potential candidates for reparation, but over 60 percent of these had total economic losses of less than five hundred dollars, which could hardly create major social problems. The proportion with losses under three thousand dollars was over 90 percent. The proportion with losses of over ten thousand dollars—losses which would cause deep economic distress in the average American family—was between 2 and 3 percent of all those with losses. Although these victims of severe injury were few in relation to the entire population, they amounted to over twenty-four hundred unfortunate persons in a single year.

Since money is not the only test of loss, another grouping was made of injuries deemed "serious" because of the amount of medical expense, the length of hospitalization, the permanency of disability, or the occurrence of death. More detailed information was obtained about these cases, which came to over ten thousand persons in a single year. They were not distributed proportionately through all age groups in the population but were significantly

concentrated in the most productive ages—from twenty-five through sixty-four years of age.

2. *The Role of the Courts*

A great deal of the attention given to injury cases has been centered on the trial, with emphasis on trial tactics, rules of evidence, and delays in getting to trial. Of more than eighty thousand injury victims, only about five hundred—less than 1 percent—reached trial. Substantially all of these were the victims of "serious injuries" and comprised about 5 percent of that group. The other 95 percent of the "serious injury" victims, and the other 99 percent of all victims, dropped or settled their cases without the benefit of a trial on the merits.

But the court role is much larger than these figures would suggest. About 5 percent of all injury victims, including about 26 percent of the "serious injury" victims, filed suit; these claimants collected damages much more frequently than those who did not sue. However, there was a selective process administered by injury victims and by lawyers in bringing the more hopeful cases to court; it is impossible to say how far the greater reparation in the court-filed cases reflects the advantage of filing, and how far it represents the shrewd judgment of those who decided whether or not to file. The impressive fact remains that a substantial majority of "serious" cases, and the great mass of all cases, were terminated without court intervention.

This suggests some important lessons for those concerned with improvements in the disposition of injury claims. Improvements in court procedures have no direct impact on the welfare of the majority of claimants and defendants in injury cases; the majority of persons are affected only to the extent that what goes on in court is reflected in what goes on out of court. Interviews indicated that many factors besides a cold prediction of the jury verdict influenced injury victims to settle or abandon their claims. If the handling of the great mass of injury claims is to be im-

proved, it is the adjustment process rather than the judicial process which will have to be changed.

A second lesson is a gloomy one for the expeditors of jury trials. For every injury case now reaching trial, there are seven more suits which are settled before trial, and the long delay is one of the reasons for settling. A slight reduction in delay will surely bring additions to the backlog of cases seeking trial. And behind the woodpile of filed cases lies a forest of unfiled cases which might become filed cases if court procedures were more expeditious.

3. *Sources of Relief for Injury Victims*

Fortunately for the victims of automobile injuries, most of them are not forced to sustain unaided the blows of loss.

The most important source of outside help was the system of tort liability insurance, to which uninsured tort liability made an insignificant addition. Tort settlements (with or without court action) furnished a little more than half of all the reparation received.

Second in importance came a number of other kinds of insurance grouped as "loss insurance." This term embraces life insurance, health insurance, automobile collision insurance, and all other kinds of insurance which people buy for protection against their own losses, rather than against liability for someone else's losses.

All other identified sources were of minor significance in the aggregate, however important they may have been in individual cases. However, it is probable that social security plays a much larger role than these figures indicate. Social security payments to disabled persons under age 50 did not become effective until late in 1960, after most of the field work in the study had been completed. Social security benefits for older disabled persons, and for the survivors of fatality victims, were in effect; but since the bulk of these were future expectations, they were difficult to esti-

mate satisfactorily. The only payments which were tabulated as reparation received from social security were pension instalments which had been received at the time of interview; these amounted to only about 2 percent of total reparation received.

Before translating these data into action programs, it is important to recognize that the relative roles of various reparation systems are undergoing mercurial changes. A moment's reflection will recall the fact that social security and health insurance were practically nonexistent thirty-two years ago when the famous Report by the Committee to Study Compensation for Automobile Accidents was published. One chapter of the present study shows how these programs, in their entirety, have overtaken and far surpassed automobile liability insurance in twenty years. Their growth is continuing as these words are written. An intelligent program for dealing with injury reparation must consider how large these programs have become, and how much larger they will be at the target date for any revision program.

A shift of the fulcrum of reparation from tort liability to health and income insurance has already taken place in England, France, Germany, and Sweden.

4. Levels of Relief

In the aggregate, the total reparation received by injury victims was roughly half of their economic losses. But its distribution is amazingly uneven.

Some injury victims got nothing at all; this was the fate of more than a fifth of all those suffering some economic loss, but many of these had such small losses that nonreparation must have imposed little hardship. More impressive is the fact that about 6 percent of the "serious injury" victims received no relief from any source.

Among the "serious injury" victims who received some reparation, it was possible to make case-by-case comparisons between the amount of loss and the amount of reparation. At one end

of the scale were one fifth of the injury victims, recovering less than a quarter of their economic loss; at the other end were another fifth, who recovered more than one and a half times their economic loss. The smaller the loss, the greater the chance of generous compensation. Among persons with losses of under a thousand dollars, nearly a third received much more than their economic loss; among those with losses of \$25,000 or more, only a twentieth substantially surpassed their economic loss.

These observations relate to reparation from all sources; when tort reparation alone is considered, the disparity between the level of reparation becomes even more striking. No one with a loss exceeding \$25,000 was found to have received a tort settlement even approaching his economic loss. (See chapter 6.)

This phenomenon of ample settlements for the least severe injuries and fractional ones for the most severe is emphatically confirmed by a contemporaneous survey conducted at the University of Pennsylvania. This survey embraced minor as well as serious injuries. It showed that reparation in cases with less than one hundred dollars of "tangible loss" was frequently *five times* the tangible loss; in cases of loss exceeding \$3000, it was never as much as five times the loss, and was most frequently less than half.*

There are many possible reflections on these facts. One of the most obvious is this: justice is unlikely to be furthered by weighting the scales more favorably to claimants in general, or to defendants in general. There is little need to augment the amounts of reparation in minor injuries; there is even less need to diminish reparation for fatal and debilitating accidents.

Another reflection flows from the uneven levels of reparation when weighed with the multiple sources of reparation. If any rational pattern of total reparation is desired something must be

* Clarence Morris and James C. N. Paul, "The Financial Impact of Automobile Accidents," U. of Penn. Law Review, Vol. 110, no. 7, pp. 913, 917 (1962).

done to reduce the overlapping of reparation from different sources.

5. *The Burden of Reparation*

Reparation must be paid for. According to the pure theory of tort law, it would be paid for by the guilty cause of the accident. If the guilty cause is the injury victim himself, he would bear his own loss without reparation; if it is someone else, that person would pay "damages" to the victim.

In the cases covered by the survey, very little reparation—an almost negligible amount—was paid in this way. Practically all tort damages were paid by liability insurance companies. These companies received their funds from the premiums paid by automobile owners. Therefore the burden of reparation did not fall on the guilty; it fell on the entire class of automobile owners.

There is some differentiation among the rates of different classes of owners; an owner with a bad record may find himself paying a higher premium, but he could pay this for the rest of his life without making up the amount of a single large loss. Therefore, tort damages do not usually effect a shift of loss from the innocent to the guilty, but from nonowners of automobiles to owners and from injured owners to noninjured owners.

Although moralists might regret that the "guilty" driver seldom feels the impact of someone else's loss, economic utility theory tends to view the spreading of loss as desirable whether it takes place among the innocent or among the guilty. The only economic advantage of concentrating the burden upon the guilty would be to deter accident-causing conduct; but there is little if any evidence as to whether increasing the danger of personal liability has any such effect.

After tort damages, it will be recalled, the most important source of reparation was (loss insurance). This sort of insurance shifts losses from the injured to the uninjured; it is a device for

spreading risk among the entire group which considers itself exposed.

Social security, which probably has an alleviation role considerably greater than the survey showed, puts the burden of reparation on the whole mass of employees and employers, without regard to whether they are even exposed to the particular type of risk involved.

There are also some very significant differences in the amount of burden which must be borne in order to deliver reparation. There is no such thing as equality between benefit and burden; the process of shifting loss inevitably involves an operating expense. In tort damages, the burden is very great; in the aggregate, the total burden is more than twice the net reparation delivered. This is partly because of the refined objectives of tort reparation, which is "custom made" for each injury victim, and partly because tort damages have many other objectives beyond mere reparation, including the deterrence of negligence. At the other end of the scale is social security, where the operating expense rate appears to be about 3 percent of the reparation delivered. Private loss insurance appears to stand in between; but it is a Mother Hubbard for all kinds of regimes, some of which are nearly as costly as tort damages, and others nearly as economical as social security.

These observations have great significance for those who want to improve the lot of people who are impoverished as a result of injury. The lot of these persons might be improved by enlarging the allowances of tort law, or of loss insurance, or of social security; the burden on other elements of society would vary immensely according to the regime adopted.

6. *The Attitudes of Injury Victims*

It is not enough to bind the wounds of the afflicted; it is important that the victims of adversity should feel that society has dealt fairly with them, and that they should not carry away

grudges against courts, lawyers, and insurance companies which will poison their future relationships.

There was a disturbing stream of evidence that many beneficiaries of the services of accident reparation carry away reactions of disappointment and even bitterness. It may not be surprising that 54 percent of the seriously injured thought their tort settlements were inadequate. It is more disturbing that 53 percent thought their cases should have been handled differently to get more money; 47 percent blamed the liability insurance company for treating them unfairly. Thirty-seven percent had disagreed with their lawyers at some point in negotiations.

It is difficult to know how to weigh these answers; the survey did not ask whether the people who were dissatisfied with their tort settlements were also dissatisfied with their salaries, their housing rental, or other aspects of their lives which were unrelated to their injury. But it did ask how they felt about one aspect which was disassociated with their monetary reparation. When respondents were asked whether they were satisfied with their medical treatment, only 14 percent reported dissatisfaction.

Other observations—some of which cannot be quantified—painted an emphatic picture of anxiety, frustration, disappointment, and resentment felt by injury victims in the course of the adjustment and litigation processes. It is clear that there is room for tremendous improvement in the relations between injury victims and the people who deal with them.

B. THE DESIGN OF THE STUDY

The study was born of a suspicion that the handling of personal injury cases is among the most critical problems facing the legal profession today. Clearly a large part of the public believes that ambulance-chasing and outrageous fees are commonplace. The waiting period to get to trial in many major cities is notorious. Even legal theory is showing symptoms of malaise, as attacks are

made on contributory negligence, damages for pain and suffering, and exclusion of evidence of insurance.

The designers of this study did not wish to contribute to the welter of opinions on legal theory, nor even to add to the studies of client procurement, attorney compensation, and trial delays. They conceived the notion that a new start should be made by studying the underlying human demand whose pressures have bubbled forth in the form of a "fee problem," a "delay problem," and other "problems." This human demand was conceived to be the desire for something to fill the trench in material well-being which is gouged by a personal injury.

The grand design was to discover what are the economic losses from injury, and what is being done to repair these losses. It was supposed that the trail would lead back to the point of initial curiosity—injury litigation; but it might lead in a good many other directions, which would be equally instructive.

Three separate methods of study were adopted. The first method was to collect and analyze national statistics on programs which would presumably come to the aid of an injury victim. The results of this approach constitute Part I of this report.

The second method was a field survey. It began with interviews with persons involved in personal injury automobile accidents. Later, thanks to an additional grant of funds, it was extended to include interrogation of lawyers for the injury victims, lawyers for defendants, individual defendants, and hospitals. This led to the heart of the study, which is the survey of Michigan automobile injuries, reported in Part II.

The third method was an inquiry into foreign systems for dealing with the same human demand. Foreign laws, lawyers, courts, and insurance companies may differ from their American counterparts, but modern foreign countries are sure to have the same human demands, occasioned by accidental injuries. Informants from England, France, Sweden, and West Germany supplied

information on sources of reparation for automobile injury victims in their respective countries. Their reports form Part III.

C. SPONSORSHIP AND SUPPORT

The first plan for the present study was presented by Alfred F. Conard of the University of Michigan Law School and James N. Morgan of the University of Michigan Department of Economics and Survey Research Center to the committee charged with grants from the William W. Cook Endowment for Legal Research. In 1958, the Endowment made a grant to carry out the project, with operations to begin in mid-1959. As the project went on, it became clear that the original grant would not be adequate to permit interviewing lawyers and individual defendants as well as injury victims.

A request for funds to support an extension of the project was granted in 1961 by the Walter E. Meyer Research Institute of Law, Incorporated.

D. THE PEOPLE WHO HELPED

Many of the people whose help was most crucial in bringing this study into existence, and helping it on its way to completion, are not shown on the title page. E. Blythe Stason and Allan F. Smith, who were respectively dean of the Law School and director of Graduate Study and Research at the time the study was proposed and launched, gave important impetus and encouragement to the project. The sympathetic interest of Rensis Likert and of Angus Campbell, directors respectively of the Institute for Social Research and the Survey Research Center, was equally indispensable.

Soon after the field work on the survey had begun, the directors of the project found that they would need advice from representative groups of persons involved or potentially affected, and therefore organized an advisory committee composed of representatives of the bench, the bar, the insurance industry, and the

automobile industry. Some of the original nominees were later replaced, or represented by others. The Michigan State Bar declined to name members of the committee, but designated two members of its Committee on Public Relations to serve as observers. The roster of committee members, representatives, and observers is as follows:

The Honorable John R. Dethmers
Chief Justice of the Michigan Supreme Court

Mr. Thomas A. Eggleston
General Manager, Aetna Casualty and Surety Company

Mr. Paul Erickson
General Counsel and General Manager,
Detroit Inter-Insurance Exchange

The Honorable Frank Fitzgerald
Judge of the Circuit Court, Wayne County

Mr. W. L. Ginsburg
Director, Research and Engineering—UAW (AFL, CIO)

Mr. Chalmers L. Goyert
Director, Central Products Planning Office
Ford Motor Company

The Honorable James M. Hare
Secretary of State for the State of Michigan

Mr. Robert G. Jamieson
General Manager, Detroit Automobile Inter-Insurance Exchange

Mr. Benjamin Marcus
Marcus, McCroskey, Finucan and Libner
Attorneys at Law

Mr. Fergus Markle
Markle and Markle, Attorneys at Law

Mr. Thomas C. Morrill
Vice-President, State Farm Mutual
Automobile Insurance Company

Mr. Edward H. Schroeder
Vice President, Allstate Insurance Company

The Honorable Talbot Smith
Justice, Michigan Supreme Court, and United States District Judge
for the Eastern District of Michigan

Mr. R. Lee Williams
Attorney at Law

The committee was very helpful to the directors of the project in indicating where cooperation or resistance might be met in gathering information. Several committee members also gave additional help outside the committee sessions. In particular, Mr. Erickson was helpful in indicating what information insurance counsels would be free to furnish, and in supplying from his company's own files information on the number and character of accidents not reported to police.

The generous cooperation extended by a number of state officials and agencies was also an indispensable aid in the project.

For permission to sample official records, thanks go to Secretary of State James M. Hare, Michigan State Police Commissioner Joseph A. Childs, and Detroit Police Superintendent Louis A. Berg. The actual sampling of records for Detroit was completed in the Accident Prevention Bureau (Detroit Police Department), which was headed by William H. Polkinghorn, Traffic Director. Within the Bureau, a great deal of assistance was provided by Sergeants Wells and Crittenden.

For the state outside of Detroit, records were provided by the Traffic and Safety Division, Michigan State Police. This division was commanded by Captain Shirley G. Curtis. The actual mechanics of sampling were accomplished by Mrs. Irene H. Strayer and Mrs. Sandra Lundberg.

The samples for a number of early pretests were provided by the Ann Arbor (Michigan) Police Department, through the cooperation of Casper Enkemann, then Chief of Police.

In addition to the above, help and advice was also provided by Meredith H. Doyle, Court Administrator, Supreme Court of Michigan, by Leo Frank and Robert Yake of the Driver's License Records and Processing Division, and by staff members of Michigan State University's Traffic Safety Center, directed by Gordon Sheehe.

Within the University, consultation was generously given by Wilbur Cohen, professor of Social Work, who continued to be helpful in his later office of Assistant Secretary of Legislation of the Department of Health, Education, and Welfare. Extensive assistance on problems of insurance statistics was received from Allen L. Mayerson and Donald L. MacDonald of the School of Business Administration. Helpful suggestions were received from William Haber, then Professor of Economics, and from Robert J. Harris and many other members of the law faculty.

A number of law students (now members of the bar) gave indispensable help as research assistants. Among these were John Dood, Robert Seymour, and Harvey Friedman. A number of other law students participated as field workers in recording material from Michigan court dockets. In the more distant areas of the state, practicing lawyers were kind enough to collect and submit data on court records. These included William M. Brown, Esq., of Traverse City, and Edward A. Quinnell, Esq., of Marquette.

Since the principal research workers at the Survey Research Center were dividing their interest among this and other projects, the essential burden of maintaining continuity in the handling of data fell upon successive research assistants, both of whom worked with unusual devotion on the project. These were Miss Kaisa Braaten and Mrs. Nancy Baerwaldt.

Also at the Survey Research Center, indispensable contributions were made by Dr. Morris Axelrod, assistant head of the field section, and by his staff of experienced interviewers throughout the state, by Dr. Bernard Lazerwitz and Miss Irene Hess, who devel-

oped the sampling design, by Mrs. Doris Muehl of the coding department, and by Messrs. Charles S. Mayer and John McHale, who assisted in the gathering and analysis of interview information.

Many secretaries labored patiently with the records and the correspondence of the project. These included Mrs. Darlene Weygandt, Miss Charlotte Davis, Mrs. Dorothy Fink, Miss Dale Coventry, and Miss Elaine Gebhardt.

E. BIBLIOGRAPHY OF OTHER STUDIES AND OF REFORM PROPOSALS

The present study was designed to enable concerned persons to evaluate more competently the need for reform, or for preservation of existing elements in injury reparation systems. However, no proposals to reform or to preserve are contained in this report. All such proposals involve political and social predilections which are best separated from scientific inquiry.

The formulation of action proposals is appropriately undertaken by many persons other than those who carry on scientific investigation of the underlying problems.* For the convenience of such persons, a short bibliography of other factual studies, of proposals for change, and of reports on various legislative enactments, is included here.

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P A R T I

*INJURY REPARATION IN THE
UNITED STATES*

This part of the report offers a general view of the devices existing in this country to compensate in some measure for the losses occasioned by personal injuries. The first chapter analyzes statistics on the application of national resources to loss reparation. Most of these statistics were taken from previously published sources, although one element was drawn from Part II of the present report.

The second and third chapters are speculative inquiries into the aims and achievements of reparation systems. They are not reports of factual observations (although they contain some references to factual observations reported elsewhere); they consist largely of inferences drawn by the authors from stated assumptions. The second chapter relates injury reparation practices to recognized functions of the legal order; the third chapter relates reparation practices to accepted concepts of economic utility.

CHAPTER 1

Systems of Reparation for Injury, Illness, and Death

INTRODUCTION

When Mr. Gibbons, an English pedestrian of the year 1695, was run down by the horse of Mr. Pepper, Gibbons filed and won what may have been Britain's first traffic accident suit.¹ It is easy to rejoice that he won it, even if it was only on a technicality.² For one may safely assume that Gibbons had no National Health Insurance, no Blue Cross plan, no sick leave pay, no disability benefits, no health insurance, no rehabilitation center, and probably no free hospital.

And so, very properly, the law built up a structure of rules and principles permitting traffic victims to sue for, and recover, all their losses: their hospital bills, their medical bills, their lost wages, their lost opportunities for self-employment, their lost comfort and their lost pride. Writers and researchers who are concerned with the plight of traffic victims have focused their attention on the sufficiency or insufficiency of the amounts which are recoverable in damage suits. A great cooperative effort of lawyers and social scientists brought forth in 1932 a report to the Columbia University Committee for Research in the Social Sciences, directed almost exclusively to the adequacy of reparation secured under tort law.³ When Professor Ehrenzweig la-

¹ 1 Ld. Raym. 38, 91 Eng. Rep. 922 (Court of King's Bench, 1695).

² Pepper had a good excuse, since his horse went out of control. But he made the pleading error of saying, "I ran down the plaintiff, but I didn't mean to," instead of saying, "No, I didn't run down the plaintiff." In Latin, of course.

³ Report by the Committee to Study Compensation for Automobile Accidents (Columbia University Council for Research in the Social Sciences, 1932).

The discussion in the text of the report is largely based on statistics from a wide selection of cities; in these statistics, "compensation" excluded voluntary loss in-

mented the lot of the accident victim in 1954, when Judge Hofstadter proposed "an alternative plan" in 1956, when Judge Marx advanced a "new approach" in 1958, and when Dean Green authored "Traffic Victims" in 1960, their eyes were on the insufficiency of the remedy by lawsuit.⁴

Meanwhile, the accident victim has been incidentally succored by relief from quite different sources. Over 70 percent of the population have voluntarily bought hospital or medical insurance, and a smaller number have bought disability insurance to pay them subsistence when they are hurt. Employers have introduced sick leave plans; workmen's compensation has provided medical benefits and cash benefits for those whose accidental injuries are work related. Social security has brought disability payments to most employed workers who are permanently and totally disabled. Public hospitals furnishing services free to those who cannot pay have multiplied.

The law of tort has maintained its even gait without much regard to the effects of competition by these newcomers in the relief of traffic victims. When it has noticed them, it is to say that they make no difference. The defendant is bound to pay the work-

insurance, workmen's compensation, and charity (p. 248). "Insurance" included only liability insurance.

The report does contain an interesting report of "Connecticut Case Studies" in which "compensation" from voluntary loss insurance and from employers was recorded (p. 218-35). These cases do not seem to have entered significantly into the findings of the report on its conclusions.

See also James, "The Columbia Study of Compensation for Automobile Accidents: An Unanswered Challenge," *Columbia Law Rev.*, Vol. 59 (1959), p. 408.

⁴ Albert A. Ehrenzweig, *Full Aid Insurance* (Berkeley: University of California Press, 1954).

Samuel H. Hofstadter, "Alternative Proposal to the Compensation Plan," *Cornell Law Quarterly*, Vol. 42 (1956), p. 59; *idem*, "A Proposed Automobile Accident Compensation Plan," *Annals of the American Academy of Political and Social Science*, Vol. 328 (1960), p. 53.

Robert S. Marx, "A New Approach to Personal Injury Litigation," *Ohio State Law Journ.*, Vol. 19 (1958), p. 278; *idem*, "Compensation Insurance for Automobile Accident Victims," *Ohio State Law Journ.*, Vol. 15 (1954), p. 134. *idem*, "Motorism, Not Pedestrianism," *American Bar Association Journ.*, Vol. 42 (1956), p. 421.

Leon Green, *Traffic Victims: Tort Law and Insurance* (Evanston: Northwestern University Press, 1958).

man all the wages he has been prevented from earning, even though the workman has received disability benefits in lieu of part or all of them. The defendant must pay the amount of the plaintiff's hospital bill even if Blue Cross has already paid it.

In a few instances, the law has recognized that what the plaintiff gets should go to the person who has paid the bill, and who is said to be "subrogated" to the plaintiff's rights. In other cases, there is no subrogation. In neither event does it make any difference in the amount which the court will order the defendant to pay.⁵

This may well be as it should be. But the many sources of payment cannot be ignored by everyone. Those who lament the fate of the poor traffic victim cannot afford to ignore entirely what he may receive from other sources. Neither can those who are concerned with the costs of accidents and the costs of insurance against the effects of accidents. To illustrate the diverse means by which a typical automobile accident victim might be compensated today, a hypothetical case will be presented.

A. CASE (OR TWO) IN POINT

On his way to work one morning, a carpenter became involved in a complicated three-car collision. As a result he was badly injured, and was taken to a public hospital for emergency treatment; he was later removed to a private hospital where, after extended treatment, he died. He suffered severe losses, and so did his family. If some part of these losses was compensated, where did the financial resources come from?

Taking the sources of reparation in the order in which they affected the injury victim, the first was free emergency medical care. The ambulance and emergency hospital service which the carpenter received were provided by his local municipality. Although such patients are theoretically liable for the value of

⁵ Spencer L. Kimball and D. A. Davis, "The Extension of Insurance Subrogation," *Michigan Law Rev.*, Vol. 60 (1962), p. 841.

services received, public hospitals rarely collect more than nominal charges, so that their services are "free" to most of their emergency patients.

After the carpenter was removed to the private general hospital, his group hospital medical insurance paid for the lion's share of his hospital and surgical expenses and, in addition, paid for a good part of the expenses of his personal physician.

While medical treatment was going on, pay days were slipping by, and the family expenses for food, shelter, and clothing continued. Fortunately for this carpenter, his employer had a liberal sick leave plan which gave him almost full pay for several weeks. But after a while his accumulated sick leave ran out, and his family had to look elsewhere for a wage substitute. After six months, he might have started receiving disability benefits under social security, if he had remained alive but permanently and totally disabled.

The eventual death of the patient was a signal point for the termination of most of the benefits that he and his family had been receiving, but the fact of death also qualified them for other benefits. His personal and group life insurance provided a fund to help his family adjust to permanent removal of the principal source of family income. In addition, the family was able to qualify for substantial social security benefits. The widow received a lump-sum death payment in the amount of \$255 and monthly survivors' benefits which would continue until their youngest child reached eighteen, and then lapse until the wife reached 62, when she could become eligible for social security old age benefits.

If the carpenter's accident had occurred about a half hour later, when he was on his way from his employer's office to the job site, his injury might have been considered to have arisen "out of and in the course of" his employment so that he would have been entitled to workmen's compensation benefits. These would have consisted of free medical care provided by his employer, weekly

disability payments, and upon his death survivor payments to his widow. His eligibility for these benefits would probably have simultaneously disqualified him from some part of the benefits he received for the nonoccupational accident, that is, sick leave and group health insurance.

As a coda to this little story, it might be added that two years after her husband's death, the widow received a tort settlement from the insurance company which had insured the liability of the driver who was finally determined to have caused the accident. It was a tidy sum—part of which she used to pay her attorney, part to pay off the mortgage, and part to buy a new car.

The carpenter's story suggests the plurality and overlap of loss-shifting regimes. Although some overlap is probably the normal state, cases also exist in which injury victims fall in the gaps between regimes. To illustrate this problem with a rather extreme, but nevertheless real example, one may take the case of the farm laborer who suffered sunstroke and fell off his tractor while cultivating potatoes for his employer—a potato chip manufacturer. As a result of this incident the man permanently lost his hearing and suffers intermittent dizzy spells, so that he can sit up only for short intervals. He has been unable to work for several months and his family has no other source of income to look to.

How many of the various reparation sources discussed above apply to him? He had no health insurance, so that the medical bills he has run up will probably be written off by his doctor and hospital as bad debts. His employer had no sick leave plan—at least none that he was eligible for. He attempted to file a workmen's compensation claim but found that there were several barriers to recovery here. First, the workmen's compensation act in his state specifically exempts farm laborers from the coverage of the compensation act. Second, even if he were covered by the act it is very doubtful whether he could recover since his state has considered sunstroke and the disabilities which result therefrom as a risk to which all persons in the locality are subject and

not a risk which arises out of his employment. Finally, if he attempted to bring his claim as an occupational disease he would be met again by the exception for the agricultural industry.

In any tort suit it would be practically impossible to show any negligence on the part of the employer, but even if he could do so, he would undoubtedly be barred by a defense of assumption of risk or contributory negligence defenses which have been kept alive for employers of farm laborers and domestic servants, although they have been abrogated for most other employers by statute, even when there is no coverage under the workmen's compensation act.

What remains? Public assistance or some other form of government welfare is probably the most likely source of relief for this family. In addition, if the disabled laborer was covered by social security for at least five out of the last ten years he might qualify for disability benefits after six months of permanent and total disability.

B. ROADS TO REPARATION

The carpenter in the preceding section was doubtless luckier than the average traffic victim in the number of resources which came to his aid. But the story falls far short of exhausting the total list of resources which may come to the aid of injury victims. There are funds for the aid of the crippled and the blind, there are public assistance and a variety of charities, there are union health and welfare funds, and so on.

In order to get a comprehensible view of reparation in its totality, it will first be useful to notice what they all have in common. Every system tends to shift to someone else the loss which originally fell on the carpenter; this is the meaning of "reparation" as used here. The important differences are in the way and in the degree in which the distribution takes place.

One notes at the outset that some of the systems of reparation involve an initial shift of the loss to some other private person—

whether an individual or a corporation—who is said to be “liable”; the loss will be borne by him instead of the original victim, except to the extent that the second person carries insurance equal to the liability. Other sources of reparation operate through the medium of “loss insurance,” in which the insurance company makes its contract directly with the persons whose injury is to be paid for. Some sources of reparation come through the tax system; the funds are raised by compulsory taxation either on persons who are in some way related to the prospective beneficiaries, or on the general tax-paying public.

These various means by which personal losses are shifted to the larger community can be grouped according to their basic characteristics. The following classification will be used in this study:

- (1) legal liability systems (tort and workmen’s compensation),
- (2) private loss insurance systems (e.g., life and health insurance),
- (3) sick leave and nonoccupational disability systems,
- (4) social insurance systems, and
- (5) noninsured public programs (e.g., public assistance and veterans’ benefits).

A brief description and a few basic facts about each of these reparation systems will further illustrate the diversity of approaches, compensation standards, methods of finance, and social functions which are currently in operation. Although many of the items discussed are old and familiar, they are restated in the hope that additional insight may be gained by putting common knowledge into a new frame of reference.

1. *Legal Liability Systems*

a. *Tort liability.* Tort law in general attempts to shift the losses caused by personal injury by requiring the party whose fault caused the injury to “make whole” the injured party by means of

a money payment. Practically all measurable and foreseeable financial loss can be recovered including medical expenses (both past and prospective), loss of income (past and prospective), property loss, and miscellaneous expenses such as prosthetic appliances and wages of a babysitter or housekeeper. In addition, the injured person can collect an allowance to compensate for certain affective or noneconomic losses—principally pain and suffering, but also for humiliation due to disfigurement, inability to lead a normal life, and in most states a surviving husband can recover for loss of consortium. In order to recover damages for any of these items, the plaintiff must show that his injury was caused by conduct of the defendant in which the defendant was negligent, and in most states that the plaintiff himself was free from contributory negligence.

These are the elements about which legal theorists love to wrangle, but their prominence has tended to obscure two other characteristics which are most important from an economic standpoint. The first is the adaptability of the remedy to all kinds of losses; it attempts to measure the losses for injured workers, students, and housewives alike. The second characteristic of the tort remedy is its concentration on a single lump-sum payment, which results in delaying all reparation until the total effects of the injury have become manifest, so that a good part of the compensation arrives after the immediate need for it has passed.

The principal source of tort liability payments is automobile liability insurance. The National Safety Council estimates that there were about 1,400,000 personal injuries caused by automobile accidents in 1961;⁶ another study reports that more than 8 out of 10 cars on the road carry some form of liability insurance.⁷

⁶ Accident Facts, 1962 (National Safety Council, 1962), p. 3.

⁷ This is measured by the percentage of persons who filed financial responsibility reports with Motor Vehicle Departments who were covered with public liability and property damage insurance. Source: Appendix A to Report of the Subcommittee Appointed to Study the Proposed Automobile Accident Commission Plan to the Automobile Insurance Law Committee of the American Bar Association (August 1960).

Substantial benefits are also paid on account of tort liability by railroads, bus lines and other carriers, on account of product liability by manufacturers, and on account of "building and sidewalk" injuries by landlords and municipalities. These liabilities are generally insured unless the defendant has enough resources and loss experience to warrant becoming "self-insured."

b. *Workmen's compensation* represents a historic compromise between the tort principle of full compensation (but only for the innocent) and the social objective of compensation for all (although for only a part of losses). The system is designed to compensate injured workers and their families, whether or not anyone was at fault, for medical expenses, and for the most essential part of wage losses, resulting from occupational injuries. Every state and the federal government operate workmen's compensation programs, and about 8 out of every 10 civilian wage and salary workers are covered by these programs.⁸ The unemployed, the self-employed, unpaid family workers, and employees of very small establishments are usually excluded. Each week almost half a million workers look to workmen's compensation for assistance in covering their injury losses.⁹ About 98 percent of these injured workers have suffered relatively minor injuries (94 percent temporary disability and 4 percent minor permanent disability), while less than 1 percent have suffered major permanent disability and another 1 percent are fatalities.¹⁰ In order to qualify for benefits the worker must suffer a disability which is compensable (many diseases are not covered) and must be able to show that there is a causal link between his employment and his disability. If he meets these requirements, the disabled worker

⁸ Alfred M. Skolnik, "New Benchmarks in Workmen's Compensation," *Social Security Bulletin*, Vol. 25, No. 6 (June 1962), p. 5.

⁹ In 1954 it was estimated that the weekly number of beneficiaries was between 340,000 and 470,000, and the total number has undoubtedly gone up since then. Dorothy McCommon and Alfred Skolnik, "Workmen's Compensation, Measures of Accomplishment" *Social Security Bulletin*, Vol. 17, No. 3 (March 1954), p. 13.

¹⁰ Earl F. Cheit, *Injury and Recovery in the Course of Employment* (New York: John Wiley & Sons, Inc., 1961), pp. 28, 30.

is eligible to receive free medical care, generally without any dollar limitation, and weekly cash benefits while he is unable to work. These usually vary according to his earnings and have a fixed dollar and time limitation. For the permanently disabled there are weekly cash benefits which are determined by a "schedule" of certain permanently disabling conditions with benefits payable listed for each condition. "The schedule ratings are based on the presumed relation between physical loss or impairment and earning capacity, and are used, directly or as a benchmark, to set benefits."¹¹ Survivor benefits usually are also paid in periodic installments and vary according to such factors as dependency status, earnings, age, and remarriage of the widow.

From an administrative standpoint workmen's compensation is based upon an elaborate classification system in which the major problem is deciding into which pigeon-hole the particular worker's disability falls. Once that is established, the dollar benefits are determined, and the necessity for individual loss appraisal eliminated. While this approach may make good sense in the "typical" case, it necessarily results in the equalization of unequals when, for example, a glass blower and a ditch digger both receive the same disability rating for the loss of a finger. And the classification problem—determining the nature of the disability—has turned out to be more involved than it must have appeared to the framers of the system.

c. *Employers' liability systems.*¹² "Employers' liability" laws are chiefly relics of the period before workmen's compensation laws gained acceptance, and they vary greatly. Their common element is that they give the injury victim some advantage over his status under tort law—usually by relieving him of some or all of the notorious "common-law defenses," which were assumption of risk, contributory negligence, and the fellow-servant rule. These

¹¹ *Ibid.* at 162.

¹² For an excellent summary of contemporary employers' liability laws, see Cheit, *op. cit.*, 186-216.

laws fill an interstitial space in many states, where workmen's compensation laws do not reach because of the number of employees involved, or because of the exclusion of particular injuries.

However, there is one "employers' liability law" which covers a very important segment of employees, and an equally important segment of injury payments. That is the Federal Employees Liability Act, which applies to the employees of interstate railroads, and has been extended to seamen employed on navigable waters.

Viewed as reparation devices, employers' liability laws share most of the characteristics of tort actions. All losses are recoverable, and in a lump sum. The chief difference is that recovery is permitted to many claimants whom the tort law would disqualify.

2. *Private Loss Insurance*

a. *Life insurance* is the traditional form of individual self-protection against the economic losses that result from premature death due to illness or injury. It pays a predetermined fixed sum (face value) upon the occurrence of the death of the insured. In 1960 the lives of 7 out of every 10 Americans were covered by some form of life insurance, and it is estimated that in 6 out of 7 families one or more members were protected by life insurance.¹³ Group life contracts, issued through employers, unions, associations, and other groups, covered about two-thirds of the nation's civilian, nonfarm workers in 1960, and provided about one-third of the total insurance in force.¹⁴ Aggregate life insurance in force per family in 1960 was about equal to the sum of 20 months of disposable personal income for each family.¹⁵ About 60 percent of this insurance protection involved an element of savings (as in ordinary life or endowment insurance), while 40 percent was term insurance.¹⁶ Thus, a good portion (about one-

¹³ *Life Insurance Fact Book, 1961* (New York: Institute of Life Insurance, 1961), p. 15.

¹⁴ *Ibid.* at 12.

¹⁵ *Ibid.* at 9.

¹⁶ *Ibid.* at 14.

third) of the benefits paid by life insurance represents a return of savings.¹⁷ Similarly, many families receive death benefits from retirement plans, but since this is almost exclusively a return of savings, it is not included here among the loss-shifting reparation systems. In addition to death benefits, many life insurance policies provide for waiver of premium, and sometimes payment of monthly income, if the insured becomes totally and permanently disabled.

b. *Health insurance* in its various forms includes protection for hospital, surgical and other medical expenses, as well as loss-of-income protection. Almost three-fourths of the country's civilian population had some form of health insurance protection in 1960, the overwhelming majority of which they had obtained through group policies at their places of employment.¹⁸ For these employee-benefit plans, employers paid over two-thirds of the total costs, and there is a trend toward full payment.¹⁹ Typically, the insurance covers the family of the policyholder so that in 1960 about three-fifths of the persons covered by group plans were dependents of policyholders.²⁰ Most medical insurance covers loss regardless of cause, and limits it only in terms of facilities used. For instance, many policies insure only expenses incurred in a hospital; those which include outside care commonly exclude dental, optical, and psychiatric care. Loss-of-income insurance is sometimes payable only for accident-caused disabilities.

Except for accidental death and dismemberment insurance, in which a fixed sum is paid regardless of actual economic loss, benefit payments under "health insurance" are geared to the actual economic losses incurred, and payments are usually made as soon as the fact of loss can be demonstrated, up to the point where the

¹⁷ See note 55, *infra*, [concerning reserves released by death].

¹⁸ Source Book of Health Insurance Data, 1961, (New York: Health Insurance Institute, 1961), pp. 9, 12.

¹⁹ Alfred M. Skolnik, "Employee-Benefit Plans, 1954-60," Social Security Bulletin, Vol. 25, No. 4 (April 1962), p. 14.

²⁰ *Ibid.* at 7.

limits of the policy are reached. It has been estimated that health insurance in 1960 paid for almost half of the country's private expenditures for hospital and physicians' services, and over one-fourth of total private expenditures for all forms of health care (including nursing, drugs and medical supplies).²¹

3. *Nonoccupational Disability Insurance and Sick Leave*

There are three main private sources of wage replacement for the worker who becomes disabled and unable to work because of nonwork-connected injury or illness: (1) insurance which provides cash sickness benefits, (2) formal paid sick-leave programs, and (3) informal arrangements whereby an employee simply is not docked for being off sick. The last named by its very nature precludes any quantitative estimates of its extent or of the amount of protection supplied by it.

Disability insurance is generally obtained voluntarily through private insurance companies on an individual or group basis, or through certain self-insuring groups such as union-management trust funds and mutual benefit associations. In four states (California, New Jersey, New York, and Rhode Island) and for interstate railroad workers, there are publicly operated funds providing cash sickness benefits; in three of these states (California, New Jersey, and New York) there are compulsory disability insurance laws under which about half of the coverage is underwritten by private plans. Formal sick-leave plans are enjoyed by almost all federal employees, four-fifths of state and local government employees, and a much lower percent of the workers in private employment.²² Among wage and salary workers in private employment in states without compulsory laws, only slightly over

²¹ Louis S. Reed, "Private Medical Care Expenditures and Voluntary Health Insurance, 1948-60," *Social Security Bulletin*, Vol. 24, No. 12 (Dec. 1961) p. 10.

²² Alfred M. Skolnik, "Income-Loss Protection Against Short-Term Sickness, 1948-60," *Social Security Bulletin*, Vol. 25, No. 1 (Jan. 1962), p. 4.

half had any sort of formal protection against nonoccupational disability, including protection through disability insurance.²³

As under other forms of insured protection, there are maximum limits on the protection provided by disability insurance, usually expressed in the number of days or hours for which cash benefits will be provided. A plan providing protection for more than six months is very rare. In addition, many plans have a waiting period of a few days in order to reduce costs and discourage malingering, at least if disability is not "accidental." Sick-leave plans usually provide for continuation of full salary, while most insurance plans provide for paying a fixed percent of the lost income (often two-thirds). Of the total protection provided in 1960 about half was group protection for wage and salary workers in private industry, about a third was sick leave for government employees, and the balance was for purchasers of individual insurance.²⁴

4. *Social Insurance*

The term "social insurance" is used here to denote government-operated benefit trust funds financed by compulsory contributions from members of the insured group or their employers. The dominant social insurance program in this country is the old-age, survivors', and disability insurance program (OASDI), operated as a part of the federal social security system. There are also relatively minor programs, especially for government and railroad employees.

Financed by joint employer-employee contributions based on earnings, OASDI is designed to provide monthly cash benefits for workers and their families as a partial replacement for earnings lost because of old age, death, or total and permanent disability. Although "social security" to most people signifies the old-age retirement benefits (which are beyond the scope of this study), the program also includes significant benefits for death

²³ *Ibid.* at 11.

²⁴ *Ibid.* at 9.

and illness ("survivors' and disability benefits"). In 1960 more than 9 out of 10 mothers and children were prospectively protected by OASDI against the loss of income resulting from the death of the family breadwinner.²⁵ Survivor benefits vary considerably according to prior earnings and family status; as an example, the average monthly benefit in 1960 for a widowed mother with two children was \$202.²⁶ Although disability insurance under social security is a relatively new program, already 2 out of every 3 employed persons are protected by it in the event of total and permanent disability.²⁷ Benefit levels vary in a manner similar to survivor benefits; in 1960, a permanently disabled worker with a young wife and one or more children received an average monthly benefit of \$194.²⁸ In order to qualify for disability benefits, the worker must have worked in covered employment for at least 5 out of the 10 years before becoming disabled, and be unable "to engage in any substantial gainful activity" because of an "impairment which can be expected to result in death or to be of long-continued and indefinite duration."²⁹ A waiting period of 6 months after the onset of the disability is required before payments begin. Thus, the social security disability benefits seldom begin until after (sometimes long after) private disability plans have been exhausted. Although there is generally little controversy over whether a claimant is entitled to survivors' benefits, during recent years there has been a growing volume of litigation in connection with the relatively new disability program, which has resulted, according to HEW, in a "troublesome proportion of reversed decisions."³⁰

Other social insurance programs which provide both survivor

²⁵ Annual Report, 1961 (Washington, D. C.: U.S. Department of Health, Education, and Welfare, 1961), p. 26.

²⁶ Social Security Bulletin, Annual Statistical Supplement, 1960 (Washington, 1961), Table 45.

²⁷ *Ibid.* at Tables 22, 26.

²⁸ *Ibid.* at Table 44.

²⁹ U. S. Code, Title 42, sec. 416 (i) (1), 423 (c) (1).

³⁰ Annual Report, 1961 (Washington, D. C.: U. S. Department of Health, Education, and Welfare, 1961), p. 32.

and disability benefits are railroad and public retirement plans; temporary disability payments are provided by both the railroad disability insurance program and by a few state funds. These systems have already been mentioned in conjunction with the systems of voluntary nonoccupational disability insurance.

5. *Other Public Expenditures*

Governmental units spend a considerable amount of money each year in noninsured programs in an attempt to alleviate the consequences of death and disability. These programs can be divided into three rough categories: (1) public assistance, (2) general medical facilities and worker rehabilitation facilities, and (3) veterans benefits.

Public assistance attempts to meet minimum essential needs of dependent persons not covered under social insurance or whose minimum needs exceed insurance benefits. "The provision for financial assistance, medical care, and other social services under federally aided public assistance programs available in most of the local communities of the United States has assured the minimum essentials of living to the needy, aged, blind, disabled, and children in families broken by death, incapacity, or absence of a parent" ³¹ The major programs are old-age assistance, aid to dependent children, aid to the blind, aid to the permanently and totally disabled, and the new medical assistance for the aged. About six million persons (3 percent of the population) received benefits from these public assistance programs in 1960, and about 27 percent of these because of hardship which resulted from death or disability. ³² Then there is also the catch-all protection of general assistance, a certain portion of which is used for medical payments although the proportion of general assistance beneficiaries who are on relief because of death or disability is unknown.

³¹ *Ibid.* at p. 49.

³² *Ibid.* at p. 51.

Medical and rehabilitation facilities. Most local communities operate some form of hospital and medical care facilities, the costs of which are defrayed from general revenues rather than patient charges. Even if one excludes the funds spent for construction of facilities, and the expenditures for care in institutional facilities, there still is a sizable amount of money spent each year for the operation of general medical facilities that results in "free" or subsidized medical care.

Under a state-federal program of vocational rehabilitation over 300,000 handicapped persons in fiscal 1961 were receiving service to help overcome their handicaps.³³ Of these, about 92,500 were rehabilitated and placed in jobs for which they were prepared through the services of their state rehabilitation agencies.³⁴ Of the persons rehabilitated, about 1 in 4 was a person with an orthopedic disability (amputations and other crippling conditions) which resulted from an accidental injury.³⁵ About 70,000 of the 92,500 handicapped persons rehabilitated in fiscal 1961 had been unemployed when their rehabilitation began; the remainder generally had been employed in unsafe, unsuitable, or part-time work. The Office of Vocational Rehabilitation estimates that in the first full year of employment for the entire group after rehabilitation, they will have earnings of \$180 million—or \$110 million more than the rate at which the total group had been earning in the year prior to rehabilitation.³⁶

Veterans' benefits are conferred upon qualified veterans and their families for both service-connected and nonservice-connected disabilities and deaths, although the former is the principal justification for the program and involves the largest expenditure. But benefits for nonservice-connected deaths and disabilities are nevertheless quite substantial. In 1960, disability and death unconnected with military service brought disability pensions to almost

³³ *Ibid.* at p. 380.

³⁴ *Ibid.* at p. 357.

³⁵ *Ibid.* at 360.

³⁶ *Ibid.* at 361.

a million veterans,³⁷ free hospital care to 360,000 veterans,³⁸ and survivor benefits to 700,000 widows and children.³⁹

An important limitation on availability of these benefits results from the fact that the veterans who received hospital care for non-service-connected disabilities were eligible for VA care only if a hospital bed was available and if they signed an affidavit certifying their inability to defray the cost of hospitalization. Although the numbers of beneficiaries of these programs remain relatively small, their potential coverage is significant. It has been estimated by the VA that "45 per cent of this Nation's total population consists of men, women, and children who are beneficiaries of the Veterans' Administration's many services and benefits, or for whom the veterans programs represent a reserve source in the event of need."⁴⁰

C. THE PLURALITY OF PROTECTION

The number of people who benefit from various reparation systems can be counted in at least four different ways. Sometimes a count is made of the number of people who *suffered death or disablement* resulting in benefit payments to someone in a given year. Sometimes the count is of the number of people who *received benefits* in a given year (including the widows and children of fatality victims). Sometimes a count is made of the number of persons *whose potential death or disability* could result in benefits (for instance, the number of people whose lives are insured). Finally, statistics sometimes report the number of persons who *could potentially receive benefits* (including the wives and children of insured men).

In order to present a consistent measure of the number and percent of the population that are protected by the various repa-

³⁷ Annual Report, 1960 (Washington, D. C.: Administrator of Veterans' Affairs, 1961), Table 44, p. 240.

³⁸ *Ibid.* at 16, 19.

³⁹ *Ibid.* at Table 50 at 248.

⁴⁰ *Ibid.* at 9—10.

ration regimes, one counting basis must be chosen to the exclusion of others. The basis which is practicable for the largest number of systems is the third: the number of persons whose death or disability could result in benefits being conferred. For life insurance, for example, this means the number of persons insured, and the number of dependents who are protected is, naturally, quite a bit higher.

Unfortunately, this basis is not truly applicable to tort liability insurance, which does not designate any particular group of accident *victims*, but only a particular group of persons *responsible for* accidents. If the responsible person carries liability insurance, 100 percent of the public are protected; if he is uninsured, none of the public is protected. However, it would be flagrantly misleading to say that all accident victims, or that no accident victims, were protected by tort liability insurance. It would be equally misleading to leave tort liability insurance out of the list of programs which furnish substantial protection from injury to the inhabitants of the United States. The least misleading way of presenting the effect of this regime, is to estimate the *chance* that an individual injured by any particular kind of tort will have a chance to benefit from this regime. This chance may be estimated to be roughly equal to the percentage of potential tort-feasors who are insured. Hence a percentage of the population is shown as "protected" by automobile liability insurance, although no one can say in advance which ones will prove to be, and which will not.

In considering what persons are "covered," it will be enlightening to draw a distinction between general reparation systems and those systems which are exclusively, or primarily, for workers. Veterans' benefits were placed in the "worker reparation system" category since more than 8 out of 10 veterans are employed persons.⁴¹

⁴¹ *Ibid.* at 11.

TABLE 1-1

Summary of Reparation Coverage:

Estimated number and percent of persons "protected"⁴² in event of loss due to injury, illness, or death—by major reparation systems, 1960

<i>General Reparation Systems:</i>	<i>Millions of persons</i>	<i>% of civilian population^{51a}</i>
Auto tort liability ⁴³	153	85%
Medical insurance ⁴⁴	132	73%
Life insurance ⁴⁵	130	72%
Public assistance ⁴⁶	40	22%
<i>Reparation Systems for Workers' Deaths and Disabilities:</i>	<i>Millions of workers</i>	<i>% of employed persons^{51a}</i>
Workmen's compensation ⁴⁷	44	66%
Sick-leave and nonoccupational disability insurance ⁴⁸	42	63%
Social security (OASDI)		
Survivors' insurance ⁴⁹	58	87%
Disability insurance ⁵⁰	46	69%
Veterans' benefits (nonservice connected ⁵¹)	19	28%

⁴² "Protected" means the person whose death or disability will result in the potential of benefits being conferred, either to the disabled person or to his family or other survivors; as explained in the text, this concept undergoes some modification in reporting on liability insurance.

⁴³ As explained in the text, this estimate of persons "protected" is based on the percent of automobile owners "covered" by automobile liability insurance. This percent was determined from financial responsibility reports filed with motor vehicle departments in 1959. The figure varied from state-to-state, ranging from 56 percent in Oklahoma to 96 percent in North Carolina; 85 percent is the approximate median of all states reporting. Source: Report of the Sub-Committee Appointed to Study the Proposed Automobile Accident Commission Plan to the Automobile Insurance Law Committee of the American Bar Association, Appendix A (1960).

⁴⁴ Source: Source Book of Health Insurance Data, 1961, p. 9.

⁴⁵ Source: Life Insurance Fact Book, 1961, p. 15.

⁴⁶ Theoretically, all persons are eligible to receive public assistance if they need it. But since most persons have sufficient financial resources to obviate the need for public assistance, only the number of persons belonging to families with personal incomes of below \$3000 per year were included. Source: U. S. Bureau of the Census, Statistical Abstract of the U. S., 1962 (Washington, D. C.: U. S. Bureau of the Census, 1962), Table 444.

D. THE DOLLAR PAY-OUTS OF REPARATION SYSTEMS

The general magnitude of total benefit payments for each of these loss-shifting sources can be estimated for the country as a whole from available published statistics. For a few sources, life insurance and tort liability insurance, data are available on roughly how much is paid out to the victims of automobile accidents. But for most of the benefit sources there is no way of knowing what portion of total benefit payments is allocable to automobile accident cases, or even to injury cases in general. The absence of this information brings home the point that in most reparation systems it doesn't make any difference what caused the loss; in many, it makes no difference whether the loss was the result of an accidental injury or a "natural illness." This failure to discriminate undoubtedly reflects the basic fact that cause of a death or disability is usually irrelevant to the problem of relieving the hardship which follows in its wake. It may also indicate that society has found it more efficient in some areas to insure against all (or almost all) causes, rather than developing a piecemeal system of separate coverages for losses attributable to different causes.

Although it is customary, in speaking of death and disability, to distinguish between results of "injury" and of "illness" (or between "accident" and "sickness"), in practice the distinction de-

⁴⁷ Source: Alfred M. Skolnik, "New Benchmarks in Workmen's Compensation," *Social Security Bulletin*, Vol. 25, No. 6 (June 1962), p. 5.

⁴⁸ Source: *Source Book of Health Insurance Data*, 1961, p. 20. The number includes about 14,000,000 individual policy holders, who are not necessarily within the population of "employed persons."

⁴⁹ Source: *Social Security Bulletin*, Annual Statistical Supplement, 1960, Table 22.

⁵⁰ *Ibid.* Table 27 (1962).

⁵¹ Source: Annual Report, 1960 (Washington, D. C.: Administrator of Veterans' Affairs, 1961), p. 6. There were about 3 million veterans who are not employed. For free hospital care, the veteran must certify that he is unable to pay for such services.

^{51a} Percentage base for populations in 1960: Total civilian population: 180 million; total employed persons: 67 million. Source: U. S. Bureau of the Census, *Statistical Abstract of the U. S.*, 1961 (Washington, D. C.: U. S. Bureau of the Census, 1961), Tables 2, 268.

pends mainly upon whether the cause of the death or disability is or is not traced to an identifiable event or activity. If the cause can be traced, the mishap is treated as an injury (for instance, when pneumonia can be traced to exposure following an airplane crash). It so happens that most injuries can be traced to other causes and most illnesses cannot, so that for the great bulk of the cases the injury-illness dichotomy is satisfactory; it is only in dealing with cases at the fringe of these concepts that the dichotomy breaks down and the traceability of causation becomes crucial, as in some workmen's compensation cases.⁵² For some purposes, such as accident prevention and social cost accounting, it would make a good deal of sense to segregate the disabilities that are traceable to identifiable causes. But in many reparation systems these differences are virtually ignored and, consequently, the only way to get an overview of all the entire reparation systems is to look at the undifferentiated aggregate of reparation for each system.

In order to get a perspective of the general pattern of the diverse reparation systems it is necessary to over-generalize somewhat and group together all the various systems into just a few categories. These are (1) legal liability, (2) loss insurance and allied plans, (3) public aid (noninsured), and (4) a miscellaneous catch-all category. Total payments for these groups in 1960 were as follows:

	(millions of dollars)			<i>Total Benefits</i>
	<i>Survivor Benefits</i>	<i>Disability Benefits</i>	<i>Medical Benefits</i>	
Legal liability	not segregated	not segregated	not segregated	\$ 3,178
Loss insurance (private and social) plus sick leave payments	\$5,830	\$3,593	\$4,849	\$14,272
Public aid (noninsured)	\$ 447	\$1,758	\$3,302	\$ 5,507
Miscellaneous	—	—	\$ 965	\$ 965
Total reported for all systems				\$23,922

Source: See Table 1-2, *infra*.

This classification makes evident how broadly society has put its reliance upon loss insurance (and related compensation) as the principal source of reparation payments for the economic hardship which results from injury, illness, and death. Legal liability systems, despite all the controversy they engender, provide less than one-fourth of the sums provided by loss-insurance-type systems. Benefits under legal liability systems, consisting of tort and workmen's compensation, can be broken down as follows:

	(millions of dollars)			
	<i>Survivor Benefits</i>	<i>Disability Benefits</i>	<i>Medical Benefits</i>	<i>Total Benefits</i>
Tort liability:				
Automobile personal injury claims:				
Insured payments	—	—	—	\$1,494
Uninsured payments	—	—	—	\$ 18
Other personal injury insurance payments	—	—	—	\$ 269
Personal injury claims paid by railroads and motor carriers	—	—	—	\$ 103
Total tort liability				\$1,884
Workmen's compensation	\$105	\$754	\$435	\$1,294
Total liability				\$3,178

Source: See Table 1-2, *infra*.

Since tort settlements are not awarded or reported in terms of the components of recovery for survivor, disability, and medical benefits, only the total benefit figure can be reported. Moreover, the total benefit figure includes an unknown amount which was awarded for pain and suffering and other noneconomic loss. While this tends to overstate the amount paid under tort liability for

⁵² See Arthur Larson, *Law of Workmen's Compensation*, (New York: Mathew Bender & Co., 1952), Vol. 1, sec. 38-40; *McRae v. Unemployment Compensation Commission*, 1940, 217 N.C. 769, 9 S.E.2d 595 (disease caught from a fellow-employee's cough held to be "accidental injury").

disability and death, there is a counterbalancing omission of certain uninsured tort payments (such as product liability), the amount of which is unknown and could not be estimated.

"Loss-insurance and allied plans" include those benefit plans in which a person is entitled to defined benefits as a matter of right upon the occurrence of a loss, and which are financed through his own (or his employer's) contributions. The main components are private loss insurance (group and individual), social insurance, and formal paid sick-leave plans. Their general magnitudes of payment are as follows:

	(millions of dollars)			
	<i>Survivor Benefits</i>	<i>Disability Benefits</i>	<i>Medical Benefits</i>	<i>Total Benefits</i>
Private insurance (life, loss-of-income, and medical):				
Individual insurance	\$1,761	\$ 386	\$ 446	\$ 2,593
Group insurance	\$1,115	\$ 619	\$4,403	\$ 6,137
	<u>\$2,876</u>	<u>\$1,005</u>	<u>\$4,849</u>	<u>\$ 8,730</u>
Formal paid sick leave	—	\$1,209	—	\$ 1,209
Social insurance	\$2,954	\$1,379	—	\$ 4,333
Totals	<u>\$5,830</u>	<u>\$3,593</u>	<u>\$4,849</u>	<u>\$14,272</u>

Source: See Table 1-2, *infra*.

Although some readers may be dismayed by the grouping together of insured plans with noninsured plans, of public insurance with private insurance, of indemnity insurance with sum insurance, or of employer-financed plans with individually or jointly financed plans, the common thread in all of the programs listed herein is strong enough to distinguish them as a group quite markedly from the other general systems. Indeed, in a social evaluation the separate plans in this grouping quite often appear as alternative solutions to the same basic problem.

Nevertheless, a few words of justification will be offered for some of the inclusions. Although the group was characterized as "loss insurance" there is included some "sum insurance" such as life and accidental death and dismemberment insurance where

a fixed amount is paid without regard to the actual economic loss that occurs. One may regard these as a sort of liquidated damage provision that doesn't change their basic nature as loss indemnification. Moreover, in death benefits under life insurance policies the excess of compensation over economic loss in the case of older persons (whose income-producing potential is negligible) is partially offset by the extent to which the benefit payments represent a return of the insured's savings. The life insurance benefit figure used in the table has been adjusted to take into account the general magnitude of this return of savings. And, since the savings element is likely to be greatest for older persons (the very group that suffers the smallest wage loss), the "pure insurance" benefit probably does not exceed economic loss by a large fraction of the whole.

Formal paid sick-leave plans were included here because they are essentially a self-insured system for replacing income loss due to nonoccupational disability and, for present purposes, not much different from group disability insurance financed by the employer.

Public aid (noninsured) consists primarily of public assistance, veterans' benefits for nonservice-connected deaths and disabilities, and public facilities for health care. Their general magnitudes are as follows:

	(millions of dollars)			
	<i>Survivor Benefits</i>	<i>Disability Benefits</i>	<i>Medical Benefits</i>	<i>Total Benefits</i>
Public assistance	\$ 90	\$ 876	\$ 530	\$1,496
Veterans benefits (non- service-connected)	\$357	\$ 882	\$ 521	\$1,760
Public facilities for health care:				
General medical and hospital care	—	—	\$2,174	\$2,174
Medicare	—	—	\$ 59	\$ 59
Medical rehabilitation	—	—	\$ 18	\$ 18
Totals	\$447	\$1,758	\$3,302	\$5,507

Source: See Table 1-2, *infra*.

TABLE 1-2
*Benefits Paid For Injury and Illness
 By Principal Loss-Shifting Systems, 1960*

	(millions of dollars)				
	Survivor Benefits	Disability Benefits	Medical Benefits	Total Benefits	% of all Benefits
Tort liability					
Automobile personal injury					
Insured payments ⁵³	*	*	*	\$ 1,494	
Uninsured payments ⁵⁴	*	*	*	18	
Other insured personal injury liability payments ⁵⁵	*	*	*	269	
Railroad and motor carrier personal injury claims ⁵⁶	*	*	*	103	
Total tort liability	\$ 105	\$ 754	\$ 435	\$ 1,294	7.9%
Workmen's compensation ⁵⁷				\$ 1,884	5.4%
Private loss insurance ⁵⁸					
Individual policies	\$1,761	\$ 386	\$ 446		
Group policies	1,115	619	4,403		
Total private loss insurance	\$2,876	\$1,005	\$4,849	\$ 8,730	36.5%

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Sick leave payments ⁵⁸	\$ 1,209	\$ 1,209	5.1%
Social insurance ⁶⁰	\$ 4,333	\$ 4,333	18.1%
Public assistance ⁶¹	\$ 876	\$ 1,496	6.3%
Veterans benefits ⁶²	\$ 357	\$ 1,760	7.3%
(nonservice-connected)			
Public health service facilities ⁶³			
General medical and hospital care	\$ 2,954	\$ 2,174	
Medicare	\$ 90	59	
Medical rehabilitation		18	
Total public health service facilities		\$ 2,251	9.4%
Private health service facilities ⁶⁴			
Industrial in-plant services		\$ 265	
Philanthropic		700	
Total private health service facilities		\$ 965	4.0%
TOTAL, ALL SYSTEMS		\$ 23,922	100.0%

* Segregated amounts not reported

⁵³ The figure of \$1,494 million for insured automobile liability payments in 1960 represents 88 percent of the \$1,697 million of losses *incurred* by stock, mutual, and reciprocal insurers during 1960 for auto bodily injury liability insurance as shown in Spectator, Insurance By States, 1961 (Philadelphia, 1961), p. 56. Eighty-eight percent is the ratio of losses *paid* to losses *incurred* during 1958, the last year in which information on both losses incurred and losses paid is available. Source: Spectator, Insurance By States, 1959, and Best's Fire and Casualty Aggregates and Averages, 1959 (New York: Alfred M. Best Company, Inc., 1959).

⁵⁴ The payments for automobile liability by others than insurance companies are estimated on the basis of the ratio of uninsured payments reported by defendants to total payments reported by plaintiffs, in the Michigan Survey. This ratio was 1.2 percent.

⁵⁵ The figure of \$269 million for liability insurers' payments on nonautomobile liability represents 85 percent of the \$316 million of losses incurred by stock, mutual and reciprocal insurers during 1960 for other bodily injury liability insurance as shown in Spectator, Insurance By States, 1961, p. 56. Eighty-five percent is the ratio of losses paid to losses incurred during 1957. Source: Spectator, Insurance By States, 1958, pp. 3-4 of summary, and Best's Fire and Casualty Aggregates and Averages, 1958, pp. 124, 191.

⁵⁶ The figure of \$103 million includes payments to employees and others by Class I railroads, railway express company, and intercity and local carriers of passengers. Source: Bureau of Transport Economics and Statistics, Transport Statistics in the United States, 1960 (Bureau of Transport Economics and Statistics, 1960), Part I, Table 100, Part III, Table 2, and Part VII, Tables 40 and 50.

⁵⁷ Alfred M. Skolnik, "New Benchmarks in Workmen's Compensation," Social Security Bulletin, Vol. 25, No. 6 (June 1962) Table 4, p. 8.

⁵⁸ *Survivor benefits* for individual and group insurance shown here are based on death benefit payments by private insurance companies, veterans life insurance and fraternal life insurance organizations. Total death benefits from these were \$3,705 million of which \$1,115 million came from group insurance policies, and \$2,590 million from other plans. Source: Life Insurance Fact Book, 1961, pp. 41, 101-102. Under most nongroup plans, death benefits represent in part a return of savings which is roughly approximated by the reserves released by death in insurance company accounts. The ratio of reserves released by death to total death benefits in 1960 for companies reporting this information to the Superintendent of Insurance of New York was 32 percent for all lines of insurance. Source: State of New York, The 102nd Annual Report of the Superintendent of Insurance, Volume 1-A, Tables 1-D, 1-L, 5. Assuming that this same ratio applies to the total death benefits of all nongroup life insurance, loss-shifting death benefits for nongroup insurance would be \$1,761 million. Since group policies are assumed to have no cash value, no adjustment has been applied.

Disability benefits are derived from: Alfred M. Skolnik, "Income-Loss Protection against Short-Term Sickness, 1948-60," Social Security Bulletin, Vol. 25, No. 1 (Jan. 1962), p. 5. Benefits under self-insurance plans are included with "group insurance." Some, but not all of the Skolnik figures purport to represent losses *incurred* by insurance companies, rather than *benefits paid* by them; others are not specified. "Benefits paid" are reported by Source Book of Health Insurance Data, 1961, p. 42, at \$839.2 million, but are not separated with respect to group and individual policies. The corresponding total of insurance company losses incurred on group and individual policies according to Skolnik is \$955.0

million. It is not clear whether this difference reflects the gap between what is paid and what is incurred, or some other difference in reporting basis.

Medical benefits are reported as shown in Source Book of Health Insurance Data, 1961, p. 41. They include benefits paid by insurance companies, Blue Cross and Blue Shield plans, and miscellaneous hospital-medical plans including independent and medical society-approved plans. Although there are some deviations, all Blue Cross-Blue Shield and miscellaneous plans are treated here as group plans. The division of insurance company benefits by individual and group insurance is made according to the group-individual breakdown of losses incurred as shown in Louis S. Reed, "Private Medical Care Expenditures and Voluntary Health Insurance, 1948-60," Social Security Bulletin, Vol. 24, No. 12 (Dec. 1961), p. 7.

⁵⁹ Alfred M. Skolnik, "Income-Loss Protection Against Short-Term Sickness, 1948-60," Social Security Bulletin, Vol. 25, No. 1 (Jan. 1962) Table 4, p. 7.

⁶⁰ Figure includes payments under OASDI, railroad retirement, federal civil service, other federal contributory, federal non-contributory, and state and local government retirement plans. Source: Social Security Bulletin, Annual Statistical Supplement, 1960, Table 7.

⁶¹ *Survivor benefits* are an estimate of Aid to Dependent Children (ADC) benefits paid to families which qualify for such benefits because of the death of a parent. The estimate was constructed by taking 9 percent (the percent of total ADC recipients in June 1961 who qualified for ADC because of the death of a parent) of the \$1,001 million of money payments to recipients in 1960 for the entire ADC program. Sources: Annual Report, 1961, U. S. Department of Health, Education, and Welfare, (Washington, 1962), p. 51; Social Security Bulletin, Annual Statistical Supplement, 1960, Table 129.

Disability benefits here are money payments to recipients in 1960 for Aid to the Blind (\$86.2 million), Aid to the Permanently and Totally Disabled (\$237.4 million) and an estimate of money payments to recipients of Old Age Assistance and Aid to Dependent Children in 1960 made because of disability. This estimate is based on the report that in June 1961 about 26 percent of the ADC recipients were receiving aid because of the incapacity of the father, and about 23 percent of the recipients of Old Age Assistance were bedridden or needed considerable personal care. Annual Report, 1961 (U. S. Department of Health, Education, and Welfare, Washington, D. C.: 1962), p. 51. These percentages were applied to the total money payments to recipients of these programs of \$1,000.8 million and \$1,269.5 million respectively to reach estimates of \$260 million for ADC and \$292 million for OAA. Source: Social Security Bulletin, Annual Statistical Supplement, 1960, Table 129.

Medical benefits here include vendor payments for medical care under Old Age Assistance (\$302.9 million), Aid to Dependent Children (\$61.7 million), Aid to the Blind (\$7.9 million), Aid to the Permanently and Totally Disabled (\$50.8 million) and General Assistance (\$101.9 million) plus payments made to recipients under Medical Assistance to the Aged (\$5.4 million), a program established in October 1960, so data only includes November and December of 1960. In 1961 benefits for MAA rose to \$113 million. Source: Social Security Bulletin, Annual Statistical Supplement, 1960, Tables 129, 130; Social Security Bulletin, Vol. 25, No. 2 (Feb. 1962), Table 7, p. 26; *Ibid.*, Vol. 25, No. 4 (Apr. 1962), Table 17, p. 38.

⁶² *Survivor benefits*: Annual Report, 1960 (Washington, D. C.: Administrator of Veterans' Affairs, 1961), Table 50, p. 248.

Disability benefits: Table 44, p. 240

Medical Benefits: These were computed by taking two-thirds of the VA's cost

Included in the miscellaneous category are certain private health care services, as follows:

(millions of dollars)	
Industrial in-plant services	\$265
Philanthropy	700
Total	<u>\$965</u>

Source: See Table 1-2, *supra*.

All four categories of reparations are assembled and totaled in Table 1-2.

E. THE DOLLAR OUTPUT AND INPUT OF REPARATION SYSTEMS

The amounts of money paid out for reparation, as presented in the preceding section, are instructive for many purposes. They are the most available common denominator for a variety of reparation systems, and they give a valid indication of the order of magnitude of the operations of different systems. But they are not the most significant figures. They are not an accurate measure of the benefits received by the injured, the ill and their dependents; neither are they a true measure of the price which society pays for the distribution of these benefits.

In order to discover the *net benefits* received by the direct beneficiaries of each system, it is necessary to deduct the beneficiaries' costs of collecting the money paid out. The Michigan automobile accident survey indicated that about 25 percent of the total pay-outs to automobile injury victims was consumed by collection expenses, consisting chiefly of legal fees. A Department of Labor report indicates that about 5½ percent of the pay-outs in workmen's compensation are eventually paid to claimants' attorneys.

of operating their inpatient hospital facilities, since this was the proportion of patients in their hospital beds in October 1959 that were receiving treatment for nonservice connected disabilities. Source: *Ibid.* at pp. 16, 19-20, Table 26, p. 200.

⁶³ Source: Ida C. Merriam, "Social Welfare Expenditures, 1959-60," Social Security Bulletin, Vol. 24, No. 11 (Nov. 1961), pp. 3, 4.

⁶⁴ Source: *Ibid.* at p. 10.

It has not been possible to obtain any usable information on the costs of collection under other reparation systems; the amounts are believed to be relatively minute.

In order to find the *total costs* which society pays in order to provide reparation for death, illness and injury, it is necessary to add the expenses incurred by insurers (private or public) in collecting through premiums or taxes the money which is to be paid out. Additional expenses are incurred by claims departments in delivering to the claimant the benefit dollar which he deserves, and in keeping him from getting more than he deserves. These must be added to the amount of benefits paid in order to get an estimate of the total amount of money which the nation spends in providing reparation for the victims of illness and injury.

The largest and most easily measured elements of loss-shifting expense consist of the expenses of insurance companies in selling, financing, and administering the millions of loss and liability insurance policies in force in the United States, and the parallel costs of government agencies such as the Veterans' Administration and the Social Security Administration. To these must be added that proportion of the costs of courts and administrative agencies which is properly allocable to the shifting of the losses of illness and injury; although total costs of such agencies are well recorded, the allocation depends on very rough estimation. Finally, there must be added the collection costs of injury claimants, on which there are no reliable national aggregates; these have been estimated on the basis of surveys of fairly limited scope, and only for "liability" systems of reparation—that is, tort and workmen's compensation. No collection expenses have been estimated for private loss insurance, social insurance, or public welfare programs, although some collection expenses are certainly incurred in connection with those programs. Their amount is believed to be very small.

The resulting estimates of loss-shifting expense for the various reparation systems are presented in Table 1-3.

TABLE 1-3
Loss-Shifting Expenses of Major Reparation Systems, 1960
 (Millions of dollars)

<i>Tort liability:</i>			
Personal injury liability insurance expense: ⁶⁵			
Automobile bodily injury	\$926		
Miscellaneous bodily injury	347		
Total personal injury liability insurance		1273	
Claimants' collection expense ⁶⁶		471	
Costs of court system allocable to personal injury litigation:			
Federal courts ⁶⁷	\$ 10		
State courts ⁶⁸	33		
Total court expense		43	
Total tort liability loss-shifting expense			\$1789
<i>Workmen's compensation:</i>			
Private insurance operating expense ⁶⁹		425	
Administrative expenses of state funds ⁷⁰		33	
Self-insured employers' expense ⁷¹		11	
Cost of state agencies ⁷²		24	
Claimants' collection expense ⁷³		71	
Total workmen's compensation loss-shifting expense			564

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	<i>Life</i> ⁷⁴	<i>Health</i> ⁷⁵	<i>Disability</i> ⁷⁶	
<i>Private loss insurance:</i>				
Individual insurance expense } Group insurance expense }	808	370 308	340 119	
Total private loss insurance loss-shifting expense	808	678	459	1945
<i>Social insurance:</i>	<i>Survivor</i>		<i>Disability</i>	
OASDI expense ⁷⁷	42		37	
State compulsory disability insurance expense ⁷⁸			9	
Railroad temporary disability insurance expense ⁷⁹			2	
Total social insurance loss-shifting expense	42		48	90
<i>Public welfare programs:</i>				
Veterans nonservice-connected benefits expense ⁸⁰			58	
Public assistance expense related to death & disability ⁸¹			131	
Total public welfare loss-shifting expense				189
<i>Total loss-shifting expense, all programs listed</i>				<u>\$4577</u>

⁶⁵ To compute the figure, losses incurred and taxes incurred were subtracted from premiums earned as shown in Best's Fire and Casualty Aggregates and Averages, 1961, pp. 130, 133, 203, 205. The result was compared with losses incurred to give a ratio of operating expenses incurred to losses incurred which was applied to the estimate of losses paid in 1960 as shown in Table 1-2.

⁶⁶ This figure was computed by taking 25 percent of the estimate of tort liability payouts made in 1960 as shown in Table 1-2. The percentage is based on the ratio of total claimants' collection expense (principally attorneys' fees) to total tort compensation in the Michigan Automobile Survey. See Tables 4-1 and 4-2 *infra*, Chapter 4. A recent Columbia University study indicates a figure of 35 percent of payouts for automobile injury claims in New York City. See Marc A. Franklin, R. H. Chanin and Irving Mark, "Accidents, Money and the Law," *Columbia Law Rev.*, Vol. 61 (1961), p. 1.

⁶⁷ This estimate was computed by taking 42 percent of the fiscal 1960 federal court expenditures for jurors and commissioners (\$4.62 million) and 26 per cent of the federal judicial expenditures for judges and supporting personnel (\$30.6 million). The 42 percent ratio is based on the assumption that jury expenses for personal injury actions were incurred at the same rate as the judge's time spent in the actual trial of these cases. A special time study of certain federal judges reported they spent 6291 hours trying jury cases, of which 2644 hours (42%) were spent in jury trials of personal injury cases based on negligence, FELA, and the Jones Act. The 26 percent figure is based upon the proportion of the judges' total time which was devoted to personal injury actions in the same time study report. Source: Annual Report of the Director of the Administrative Office of United States Courts, 1960 (Washington, 1961), pp. 148, 154-156, 157, 349.

⁶⁸ This estimate is made by adjusting the figures from a judicial time study made in four counties in the San Francisco Bay area which showed that 13.5 percent of total judges' time was consumed in the trial of automobile injury cases. Statistics on federal judges indicate that about 40 percent of judges' time is spent in trial of all cases, the rest being devoted to such tasks as motions, pretrial conferences, and legal research, among others. If the nontrial time of judges is devoted to automobile injury cases in the same ratio as trial time, a total of 33 percent of judges' time is spent on automobile injury cases. This percentage applied to the \$99.4 million of state judicial expenditures in 1960. Source: Compendium of State Government Finances in 1960 (Washington, D. C.: Bureau of the Census, 1961), Table 23; Report of the Sub-Committee Appointed to Study the Proposed Automobile Accident Commission Plan to the Automobile Insurance Law Committee of the American Bar Association, August 30, 1960, p. 31; reprinted in California Senate Fact Finding Committee on Judiciary, Automobile Accident Litigation (Part 2), (Senate of State of California, Sacramento, 1961), p. 153; Annual Report of the Administrative Director of United States Courts, 1960, (Washington, 1961), p. 157.

⁶⁹ This figure was computed by subtracting losses and taxes incurred from premiums earned (less dividends) and comparing this with losses incurred to get a ratio of operating expenses to losses incurred. Source: Best's Fire & Casualty Aggregates and Averages, 1961, pp. 128, 202. This ratio (52 percent) was then applied to losses of \$818 million paid by private insurers in 1960. Source: Alfred M. Skolnik, "New Benchmark's in Workmen's Compensation," *Social Security Bulletin*, Vol. 25, No. 6 (June 1962) p. 16.

⁷⁰ *Ibid* at 17.

⁷¹ This figure was computed by taking 7 percent of the 1960 benefit payments made by self-insured employers as shown in Alfred M. Skolnik, "New Benchmarks in Workmen's Compensation," *Social Security Bulletin*, Vol. 25, No. 6

(June 1962), p. 7. Skolnik and Katz previously estimated the administrative costs of self-insured employers at about 7 percent of their benefit payments. Alfred M. Skolnik and Allan Katz, "Workmen's Compensation Payments and Costs, 1957," Social Security Bulletin, Vol. 21, No. 12 (Dec. 1958), pp. 17-18.

⁷² This estimate includes 15.8 million dollars financed through assessment on carriers, and which is presumably included in their premium rates. This does not result in double-counting, however, since taxes were deducted in the computation of the operating expense of private insurers. Source: Alfred M. Skolnik, "New Benchmarks in Workmen's Compensation," Social Security Bulletin, Vol. 25, No. 6 (June 1962), p. 18.

⁷³ A figure of 5½ percent was applied to the \$1,290,000,000 of total workmen's compensation payouts. The 5½ percent figure was derived in the following manner. A prior study of legal fees for workmen's compensation cases in New York indicated that aggregate legal fees amounted to 3.8 percent of total compensation awards made in 1954 by the New York Workmen's Compensation Board or one of its referees. "Compensation Cases Closed 1950-1954," State of New York Workmen's Compensation Board Research and Statistics Bulletin No. 11 (1959), p. 28. These compensation awards did not include medical or hospital benefits received, nor amounts paid without the necessity for Board action. Applying total legal fees to *all* workmen's compensation benefits paid in 1954 in New York (Statistical Abstract of the U. S., 1960, Table 377, p. 287), it appears that 1½ percent of total benefits was taken up by legal fees. However, according to information collected by the Bureau of Labor Standards the New York expense rate seems lower than is typical. Consequently, the 1½ percent figure was applied only to the benefit payments of those states in which, as in New York, attorney's fees are set by the commission on an individual case basis. For all other states the maximum fee rate allowed to claimants' attorneys ("Attorney Fees in Workmen's Compensation Cases," Department of Labor Bulletin 220, pp. 6-7.) was applied to 40 percent of the reported benefits for each state, on the assumption that 40 percent of all payments were obtained by attorney representation. The 40 percent figure was taken from the New York experience, in which 1954 awards (*ibid.*) were approximately 40 percent of 1954 total benefits. (Statistical Abstract of the U. S., *op. cit.*)

<i>Attorneys' Fees</i>	<i>States</i>	<i>Benefits</i>	<i>Legal Fees-%</i>	<i>Legal Fees-\$</i>
25%	5	\$ 35,659	10%	\$ 3,566
20%	6	186,191	8%	14,895
15%	2	19,691	6%	1,181
10%	3	91,490	4%	3,660
Individual case	17	384,564	1½%	4,268
Sliding scale and varying amounts	13	181,011	3%	6,098
Total	46	\$798,606	5½%	\$43,568

⁷⁴ A ratio of operating expenses to benefits was calculated by dividing (1) life insurance company operating expense by (2) life insurance company benefits to policy holders under all types of policies and contracts. These benefits were taken to include life insurance benefits less policy dividends, plus the difference between payments and set-asides under supplementary contracts, plus additions to reserves. This indicated an expense rate of 28.1 percent, which was then applied to the death benefits of \$2,876 reported in Table 1-1 to compute the loss-shifting expense of \$808 million reported in Table 1-3. Source: Life Insurance Fact Book, 1961, pp. 38, 48, 49, 55, and 62.

With the aid of these estimates of loss-shifting expense, it is possible to present figures which present more accurately than does Table 1-2 the amounts of benefits received from the various reparation systems, and the total costs of the various systems. "Benefits received" are calculated by subtracting "collection expenses" from the reported payouts. Total costs are calculated by adding the entire loss-shifting expenses to the benefits received. The results are presented by Table 1-4 and, in graphic form, by Figure 1-1.

⁷⁵ This figure was computed by subtracting losses incurred and taxes incurred from premiums earned for both group and individual insurance and then comparing this with losses incurred to get ratios of operating expenses incurred to losses incurred. These ratios were then applied to medical benefits paid by group and individual insurance as shown in Table II. Source: Louis S. Reed, "Private Medical Care Expenditures and Voluntary Health Insurance, 1948-60," Social Security Bulletin, Vol. 24, No. 12 (Dec. 1961), p. 7.

⁷⁶ This figure was computed by subtracting losses incurred from premiums earned (less dividends) for both group and individual insurance, and dividing the remainder by losses incurred to get ratio of gross operating expenses incurred to losses incurred. The ratio was further diminished by the ratio of taxes paid to benefits paid by all insurance companies writing health policies. These ratios were then applied to disability benefits paid by group and individual insurance as shown in Table 1-2. Sources: Alfred M. Skolnik, "Income-Loss Protection Against Short-Term Sickness, 1948-60," Social Security Bulletin, Vol. 25, No. 1 (Jan. 1962) p. 5; Source Book of Health Insurance Data, 1961, pp. 34, 41.

⁷⁷ Survivor benefits: Operating expenses of the survivor provisions are not segregated from retirement provision expenses. Only a rough allocation can be made. Total OASDI administrative expenses were \$203 million in 1960. Twenty-one percent of these expenses was allocated to survivor provisions because this was the percentage of total OASDI benefits that went to survivors. Source: Social Security Bulletin, Annual Statistical Supplement, 1960, Tables 7, 21. Disability benefits: Source: *Ibid.*, Table 10.

⁷⁸ Includes administrative expenditures for operation of state funds and for supervision of private plans for New York, New Jersey, Rhode Island and California. Source: Social Security Bulletin, Annual Statistical Supplement, 1960, Table 16.

⁷⁹ Source: *Ibid.*

⁸⁰ The figure represents 3.2 percent of total benefits as shown in Table 1-2 which was the percentage of total VA benefits that was absorbed in operating costs. Source: Annual Report, 1960 (Washington, D. C.: Administrator of Veterans' Affairs, 1961) p. 144.

⁸¹ The figure of 131 millions was computed by subtracting benefits received from total program and administrative expenses. For Old Age Assistance, Aid to Dependent Children, and general assistance, where only a portion of the total benefits for these programs were included in Table 1-3, program administrative expenses were allocated in proportion to the amount which the included benefits represented to the total benefit payments for that program. Source: Social Security Bulletin, Annual Statistical Supplement, 1960, Tables 129, 133.

TABLE 1-4

*Direct Benefits Received and Total Costs of
Principal Reparation Systems*

	Net Benefits ⁸²		Total Costs ⁸²	
	\$ Millions	Percent	\$ Millions	Percent
Liability systems				
Tort liability	1,413	6	3,202	12
Workmen's compensation	1,223	5	1,765	6
Total liability	2,636	11	4,967	18
Private loss insurance	8,730	37	10,675	38
Formal sick leave ⁸⁸	1,209	5	1,209	4
Social insurance	4,333	19	4,423	16
Public aid programs				
Veterans	1,760	8	1,818	7
Public assistance	1,496	6	1,627	6
Health care facilities ⁸⁴	2,251	10	2,251	8
Total public aid	5,507	24	5,696	21
Miscellaneous ⁸⁶	965	4	965	3
Total, all systems	23,380	100	27,935	100

SYSTEMS OF REPARATION

In interpreting Table 1-4 and Figure 1-1, readers should remind themselves of its limited signification. It is *not* a representation of the relative importance of the various systems to an injury victim, or even of their relative importance to all injury victims. On the contrary, it is a presentation of the relative importance of the various systems which may aid victims of all types of *injury and illness*, including those which cause death. Neither is it a comparison of relative efficiency, since the various systems perform quite different functions, so that their expense rates are not really comparable. What the figures show is the relative magnitudes of principal reparation systems, whether measured by total costs or by net benefits.

In order to appraise the role of the various systems in regard to personal *injuries* (excluding "illnesses"), it would be necessary to know what roles these systems play in *injury* cases. One seg-

⁸² The following table relates the figures in Table 1-4 to the figures previously presented in Tables 1-2 and 1-3 (in millions of dollars).

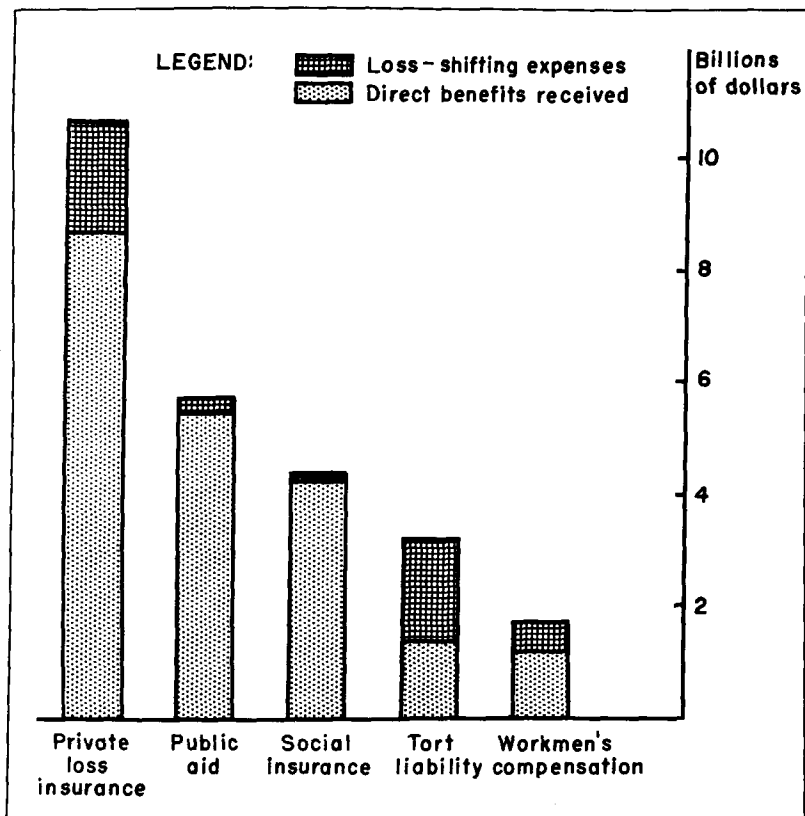
	A Pay-Outs (Table 1-2)	B Collection Exp. (Table 1-3)	C Net Benefits (A - B)	D Loss-Shifting Exp. (Table 1-3)	E Total Cost (C + D)
Tort Liability	1884	471	1413	1789	3202
Workmen's Compensation	1294	71	1223	542	1765
Total Legal Liability	3178	542	2636	2331	4967
Private Loss Insurance	8730	—	8730	1945	10675
Formal Sick Leave	1209	—	1209	—	1209
Social Insurance	4333	—	4333	90	4423
Veterans' Benefits	1760	—	1760	58	1818
Public Assistance	1496	—	1496	131	1627
Health Care	2251	—	2251	—	2251
Total Public Aid	5507	—	5507	189	5696
In Plant	265	—	265	—	265
Philanthropy	700	—	700	—	700
Total Miscellaneous	965	—	965	—	965
TOTAL	23,922	542	23,380	4,555	27,935

⁸³ The cost of administering sick-leave plans is unknown, consequently the figures here are the same as "benefits paid" in Table 1-2.

⁸⁴ The figure presented here is the same as that in Table 1-2, since the benefit data was based upon the value of the services received as measured by the costs of providing the service, which included administrative and operating expenses.

⁸⁵ See preceding note.

FIGURE 1-1—TOTAL COSTS AND DIRECT BENEFITS RECEIVED UNDER PRINCIPAL LOSS-SHIFTING SYSTEMS



ment of the Columbia Report presented information on reparation from sources other than tort liability, but this information was collected in only one of the localities surveyed, and did not apparently enter into the conclusions of the report.⁸⁶ Moreover, that study preceded the tremendous growth in private and social loss insurance, so that its evidence now holds only historical and comparative interest. In recent years, a few investigators have conducted surveys which permitted them to estimate the relative

⁸⁶ Report by the Committee to Study Compensation for Automobile Accidents (Columbia University Council for Research in the Social Sciences, 1932).

role of liability compensation for both work injuries and automobile injuries under contemporary conditions.

In the work injury area, Cheit noted that workmen's compensation plays a greater role in disability cases than in death cases, presumably because there is as yet no loss insurance for disabilities comparable to survivor benefits provided by life insurance, social security, and retirement plans. Concerning work-related death cases, Cheit stated:

When all public and private death-related payments are considered, they restore, in the median case, 34.3 per cent of earnings lost due to the occupational death for 1956 cases. One-third of this restoration is California workmen's compensation payments. The remainder is distributed among the other death-related benefits. . . . In other words, death benefits financed on a contributory basis, such as OASDI and retirement funds, and privately financed life insurance, as well as third-party awards, provide survivors about twice the benefits that workmen's compensation death benefits do. These non-compensation benefits replace about one-fifth of the median loss.⁸⁷

For disability cases Cheit found that in the very serious cases (70-100 percent disability) workmen's compensation replaced about 36 percent of the wage loss, that only 12 percent of these persons received benefits from private disability or insurance plans, and that the value of these benefits for those receiving them was \$5,000 in the median case.⁸⁸ For those with lesser disabilities, workmen's compensation replaced about 7 to 10 percent of the wage loss, and the benefits from other sources were inconsequential.⁸⁹ For both groups, he concluded, ". . . relative to dollar losses, loss replacement from these sources was not a significant source of income." He did note, however, that his study was conducted before any effect of the federal disability insurance programs could be reflected.

For injuries from automobile accidents, the Michigan survey

⁸⁷ Cheit, *op. cit.*, pp. 113-15.

⁸⁸ *Ibid.* at 181.

⁸⁹ *Ibid.*

TABLE 1-5

*Sources of Reparation for Automobile Injuries
in Michigan, 1958*

REPARATION RECEIVED

<i>Injured person's own insurance</i>	<i>Thousands of dollars</i>	<i>Percent of "total received"</i>
Hospital & medical insurance	\$10,127	11%
Life & burial insurance	4,359	5%
Automobile insurance	17,495	22%
Other own insurance	182	*
Total own insurance	\$32,163	38%
<i>Tort liability (insured and uninsured)</i>	\$46,748	55%
<i>Miscellaneous sources</i>		
Employer (including paid sick leave)	898	1%
Workmen's compensation	214	*
Social security	1,743	2%
Other	3,430	4%
Total miscellaneous reparation	\$ 6,285	7%
Total reparation received	\$85,196	100%
EXPECTED FUTURE REPARATION	\$ 8,431	10%

* Less than 1/2 of 1%

Source: Michigan Automobile Injury Compensation Survey

showed that about 55 percent of the reparation received by injury victims and their families came from tort liability. Another 38 percent came from the victims' own loss insurance, of which the largest element was "automobile insurance," covering the victims' losses by collision, theft, or medical expenses; this was followed by other health insurance, and by life and burial insurance.

Reparation sources other than these accounted for only 9 percent of total reparation, the largest single item being social security benefits for 2 percent. Table 1-5 shows the distribution of reparation from different sources.

These reparation estimates include amounts paid for property loss as well as for personal injury, since the respondents from whom they were obtained usually received lump sum settlements including (if under tort liability) a settlement for personal injury as well as property damage, or (if under victims' own insurance) payments for medical and hospital benefits along with payments for damage of the vehicle. If the figures were adjusted to omit presumed payments for property damage and loss, the proportion of reparation arising from tort liability would rise to about 61 percent, while the share of the victim's own insurance would drop to about 27 percent.⁹⁰

Other recent studies of reparation for automobile personal injuries have not attacked this problem directly, but their findings indirectly corroborate the results of the Michigan survey. In a survey of victims of 1955 New Jersey automobile accidents, the Temple University Study found that in nonfatal injury cases "the most frequently used sources . . . were 'the other party's insurance,'

⁹⁰ Respondents reported receiving \$46,748,000 on account of someone else's liability for the injury. National payouts of automobile liability insurance in 1958 were charged by the companies to bodily injury liability and to property damage liability in the ratio of 69:31 (U. S. Statistical Abstract, 1962, Table 769, p. 565). But many of these property damage payouts were undoubtedly made in cases where there was no personal injury; the personal injury fraction in personal injury cases must be higher than 69 percent.

Michigan respondents also reported receiving \$17,495,000 from their *own* insurance companies on automobile insurance policies, most of which must have been for collision insurance, although it is possible that payments under medical benefit clauses were also reported under this heading.

If the amounts in Table 1-5 are adjusted to eliminate 31 percent of the tort liability payments, and all of the victim's own automobile insurance payments, the tort fraction of all reparation would appear to be 61 percent, while reparation from the victim's own insurance would drop to 27 percent. Because of the use of lump sum settlements combining property damage with personal injury, any attempt to analyze closely the amounts paid for personal injury is forced to rely on arbitrary allocations either by the insurance companies or by the researcher.

34.64 percent, and 'respondent's own insurance,' 33.80 percent."⁹¹ These percentages, however, do not relate to the proportion of total reparation received from these sources but rather indicate the relative numbers of persons using the sources.

Data from a 1959-60 study of automobile accidents in southeastern Pennsylvania⁹² conducted by Clarence Morris and James Paul reveal in a different way the relative roles of liability and nonliability reparation. Their study showed that about half of the injury victims received no tort settlement⁹³ and that about half received no benefits at all from collateral sources such as workmen's compensation, sick-leave pay, Blue Cross or other hospital insurance, accident insurance, or any other similar sources.⁹⁴ Slightly less than a quarter of the victims received no reparation at all from any source—tort or otherwise.⁹⁵ The effect of nonliability reparation can be seen by comparing the ratio of *tort* settlement to "tangible losses" with the ratio of *total* reparation to "tangible losses." Although they do not report an aggregate ratio for these categories they do give a frequency distribution for each category, and from these it can be seen that the median group when only tort settlements are considered was less than half of "tangible losses"⁹⁶ while the median group in the distribution of recovery ratios from all sources was approximately equal to "tangible losses."⁹⁷ These figures, too, overstate somewhat the significance of tort settlements since "tangible loss" was defined as lost earnings plus medical expenses, excluding property loss,⁹⁸

⁹¹ John F. Adams, "A Comparative Analysis of Costs of Insuring Against Losses Due to Automobile Accidents," *Economics and Business Bulletin*, Temple University, (March 1960), p. 25.

⁹² Clarence Morris and James C. N. Paul, "The Financial Impact of Automobile Accidents," *University of Pennsylvania Law Rev.*, Vol. 110 (May 1962), p. 913.

⁹³ *Ibid.* at 916.

⁹⁴ *Ibid.* at 919.

⁹⁵ *Ibid.* at 920.

⁹⁶ *Ibid.* at 917.

⁹⁷ *Ibid.* at 921.

⁹⁸ *Ibid.* at 916 n. 6.

while the tort settlement figures presumably included liability compensation for property loss in cases in which it was lumped together with bodily injury liability payments.

The Michigan Study indicates that even though tort settlements provide only about half of the total reparation, they are by far the single most significant source. Payments from other sources are significant in the aggregate but for any single source the contribution to the total is relatively minor. The exception to this is that in fatality cases life insurance and social security survivor benefits amounted to a substantial portion of total reparation. Although the aggregate figures do not reveal it, there was no distinguishable pattern in the contribution of these nonliability reparation sources, as they varied widely from case to case so that no meaningful statement can be made about their relative role in the "typical" case.

F. CHANGING PATTERNS OF REPARATION, 1940-60

All of the various reparation systems have shown a marked increase in the amount of benefits paid over the past two decades. This is not surprising, in view of the general expansion of the economy, growth of population, and inflation of the dollar. In such an environment the overwhelming fact of growth of all major reparation systems tends to obscure the fact that some reparation systems have grown much more rapidly than others. The net result has been a significant shift over ten or twenty years time in the principal sources which people look to for financial assistance in the event of death or disability, as shown in Table 1-6.

Life insurance, for example, dominated the reparation scene twenty years ago, and while it has increased steadily in amount over the years, by 1960 it ranked behind both health insurance and social insurance in total benefits paid. Similarly, workmen's compensation benefit payments, despite frequent protests against

TABLE 1-6
Pay-outs of Selected Reparation Systems, 1940-1960
With Some Comparison Figures
 (millions of dollars)

<i>Reparation pay-outs</i>	1940	1945	1946	1950	1955	1960
Automobile liability insurance ⁹⁹			189	396	820	1,698
Workmen's compensation ¹⁰⁰	256	408		615	916	1,294
Life insurance ¹⁰¹	740	906		1,069	1,544	2,399
Health insurance ¹⁰²	140	410		1,299	3,125	5,688
Social insurance ¹⁰³	109	255		836	2,172	4,532
<i>Comparison figures</i>	<u>1,245</u>	<u>1,979</u>	<u>189</u>	<u>4,215</u>	<u>8,577</u>	<u>15,611</u>
Disposable personal income ¹⁰⁴	76,076	150,355	158,916	207,655	274,448	351,823
Personal consumption expenditures for medical care and death expenses ¹⁰⁵	3,533	5,756	7,015	9,711	14,014	21,326
Accident costs (wage loss and medical expense) ¹⁰⁶	2,100	2,200		3,000	4,250	5,100

⁹⁹ For 1960, 1955, and 1950: Statistical Abstract of the United States, 1962, Table 769, page 565. For 1946: *Ibid.*, 1955, Table 669, page 554.

¹⁰⁰ Alfred H. Skolnik, "New Benchmarks in Workmen's Compensation," Social Security Bulletin, Vol. 25, No. 6 (June 1962), p. 8.

¹⁰¹ The figures for reparation by way of life insurance are based on life insurance pay-outs, less the investment value of policies. In order to determine the investment value, a ratio was derived by comparing death benefits with "reserves released by death" for all companies licensed to do business in New York, as reported by New York Insurance Commissioner's 102nd Report, Vol. 1 (1961), Tables 1-D, 1-L, and 5. The figures and resultant ratios are as follows:

Year	Death Benefits millions of \$	Reserves Released		Ratio	Complement
		By Death millions of \$			
1940	845	306		.36	.64
1945	1,088	394		.36	.64
1950	1,321	511		.39	.61
1955	1,816	647		.36	.64
1960	2,609	839		.32	.68

The complementary ratio was applied to national death benefits as reported by Life Insurance Fact Book, 1961, p. 38, as follows:

Year	Death Benefits millions of \$	Ratio	Adjusted	Disability	Total
			Death Benefit millions of \$	Payments millions of \$	Reparation millions of \$
1940	995	.64	636.8	103.5	740.3
1945	1,280	.64	818.9	87.6	906.5
1950	1,590	.61	969.7	99.6	1069.3
1955	2,241	.64	1434.0	110.0	1544.0
1960	3,346	.68	2275.3	123.8	2399.1

¹⁰² For 1960, 1955, and 1950: Source Book of Health Insurance Data, 1961, p. 41. For 1945 figures for health insurance written by life insurance companies were taken from Source Book of Health Insurance, 1960, p. 37. For Blue plans in 1945, and all health insurance in 1940, payments were derived from premiums for that year reported by Source Book of Health Insurance, 1960, pp. 30, 37, and from Edwin J. Faulkner, Health Insurance (New York: McGraw-Hill Book Co., 1960), p. 564. These were reduced to benefits by ratios between premiums written and benefits paid in 1948, as shown in Source Book of Health Insurance, 1960, pp. 30, 32-33, 37.

¹⁰³ Based on amounts reported in Social Security Bulletin Annual Statistical Supplement, 1960, p. 6, for the following items:

Disability benefits

- Old age, survivors', and disability insurance
- Railroad retirement
- Public employee retirement
- State temporary disability insurance
- Railroad temporary disability insurance

Survivor benefits

- Monthly benefits
 - Old age, survivors', and disability insurance
 - Railroad retirement
 - Public employee retirement
- Lump sum payments
 - Old age, survivors', and disability insurance

rising costs, have not risen nearly as fast during the last two decades as most other reparation systems. In terms of costs (rather than benefits), average workmen's compensation costs for employers has leveled off at 91-92 cents per hundred dollars of payroll, although before the war average costs rose as high as \$1.20 per hundred dollars of payroll.¹⁰⁷

In a world where everything is growing, the problem becomes one of determining relative growth. And the first question is, relative to what? Figure 1-2 contains an insert showing the growth of disposable personal income, and indicating that it, too, was growing at a rate quite comparable to that of the reparation systems. In order to present a clearer picture of how reparation has grown as a fraction of personal income, each of the reparation systems is shown in Figure 1-3 as a percent of disposable personal income. This presentation shows that life insurance benefits, despite the vigorous growth evidenced in Figure 1-2, actually lost ground as a fraction of total personal income. Workmen's compensation barely held its own. On the other hand, a steadily increasing share of personal income was passing through the channels of automobile liability benefits, social insurance benefits, and health insurance benefits (named in ascending order).

Railroad retirement

Public employee retirement

The total figure of 4532 differs from the total of 4333 given previously in Table 1-2 because in that table an amount representing temporary disability insurance benefits paid by private carriers was removed from the "social insurance" total and added to the "private loss insurance" total. This was not done in the instant calculation because data for the adjustment were available for only a part of the time period for which the comparison is made.

¹⁰⁴ For 1960, 1955, and 1950: Statistical Abstract of the U. S., 1962, Table 422, p. 313.

For 1945 and 1940: *Ibid.*, 1955, Table 340, p. 288.

For 1946: *Ibid.*, 1951, Table 308, p. 262.

¹⁰⁵ For 1960, 1955, and 1950: Statistical Abstract of the U. S. 1962, Table 425, p. 315.

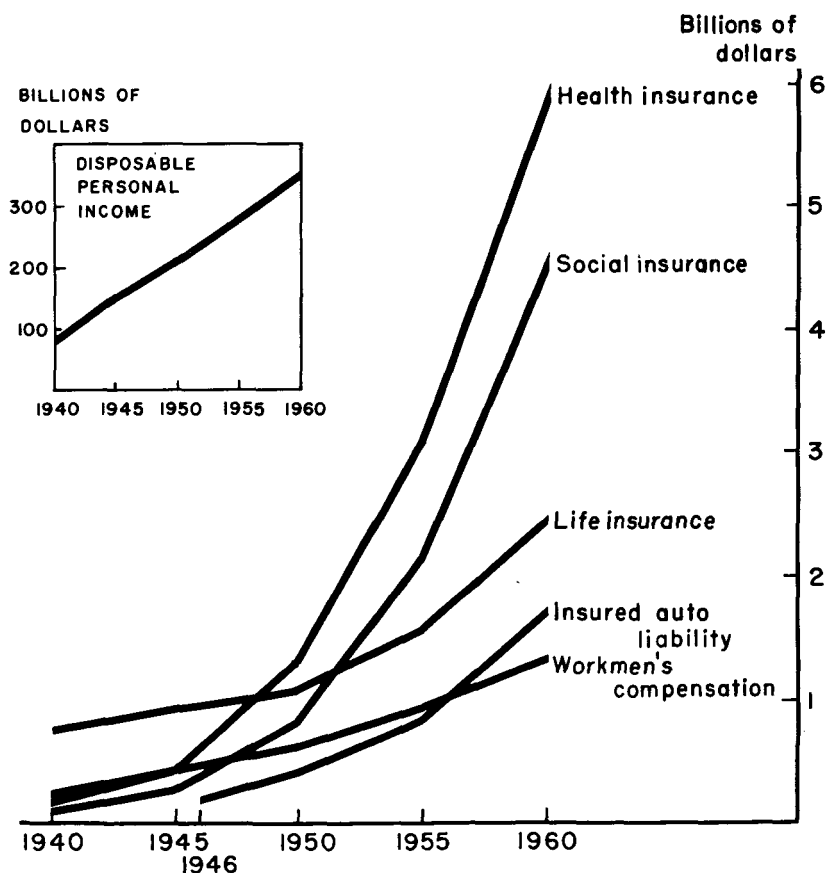
For 1945 and 1940: *Ibid.*, 1955, Table 341, p. 289.

For 1946: *Ibid.* 1953, Table 309, p. 282.

106. Accident Facts (National Safety Council, Chicago, 1941, 1946, 1951, 1956, 1961).

¹⁰⁷ Alfred M. Skolnik, "Trends in Workmen's Compensation: Coverage, Benefits, and Costs," Social Security Bulletin, Vol. 21, No. 8 (Aug. 1958), p. 13.

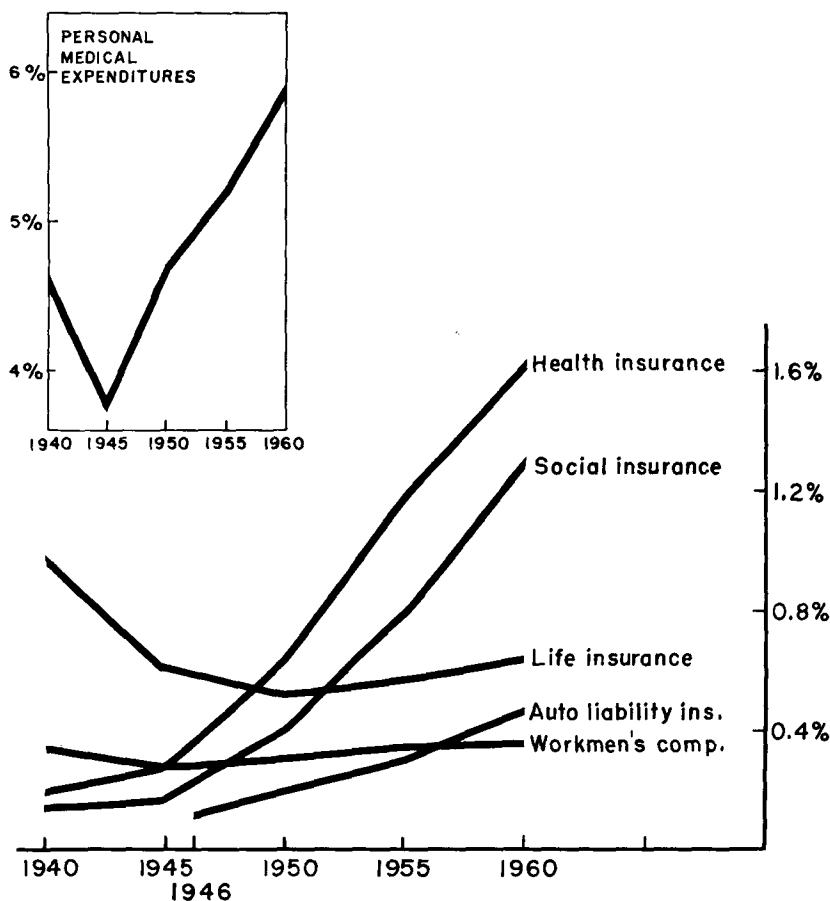
FIGURE 1-2—PAY-OUTS OF SELECTED REPARATION SYSTEMS, 1940-1960
With comparison of disposable personal income



Although reparation is obviously growing rapidly as a fraction of the national economy, this growth might be merely in step with the growing emphasis on personal well-being, which is a predictable aspect of an affluent society. What one would like to know is whether reparation is growing more rapidly than the *need* for reparation.

To estimate the total need for reparation was beyond the scope of the present study. However, two suggestive indicators of it

FIGURE 1-3—PAY-OUTS OF SELECTED REPARATION SYSTEMS, 1940-1960,
AS PER CENTS OF DISPOSABLE PERSONAL INCOME
With comparison of personal medical expenditures



are available: (1) the personal expenditure for medical and death care and (2) the estimated costs of accidents, in medical treatment and in missed wages. The insert on Figure 1-3 shows that personal medical and death expenditures were rising about as fast as the most volatile of the reparation systems. However, the more significant comparison would compare the cumulative total of the reparation systems, which is rising even more rapidly

than the amount of any one of them. This comparison is made in Figure 1-4 and shows that the total pay-outs of five of the principal reparation systems was growing much more rapidly than the steadily rising expenditures for medical and death care.

Also interesting is the comparison of reparation with "accident costs" by way of medical expense and wage loss, as estimated by the National Safety Council. These fell sharply as a fraction of personal income during World War II, and have maintained an even growth (about equal to personal income) since then; reparation pay-outs have zoomed past them.

These comparisons confirm the well-known fact that reparation systems—mostly operating through some kind of insurance—are now caring for a larger and larger share of the losses suffered by way of injury and illness.

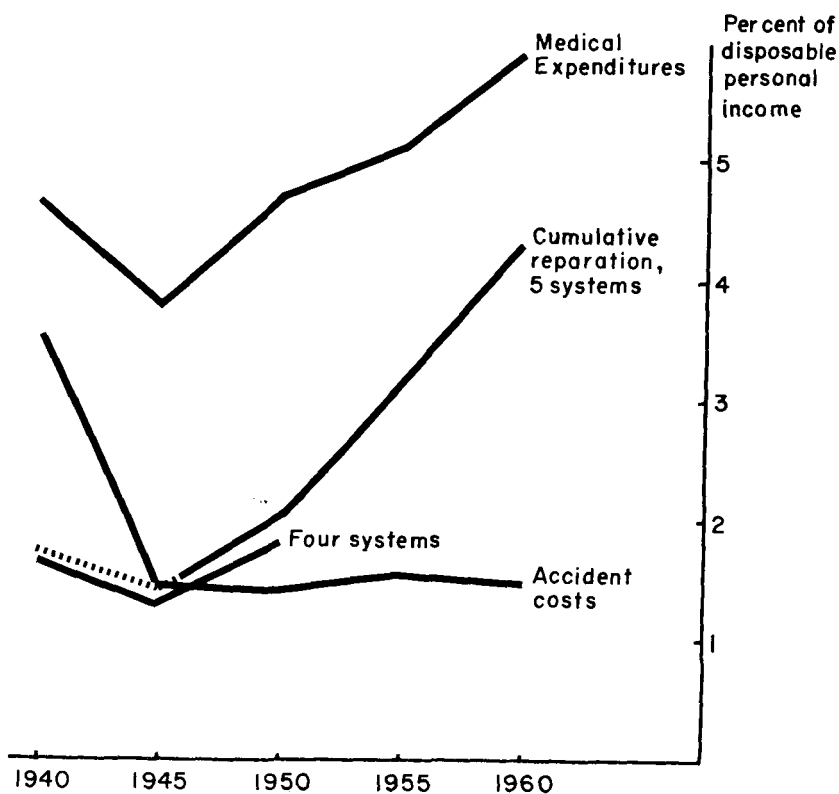
In looking at the changes in benefit payments by the major reparation systems it can be readily seen that there have been two main types of growth in the period since the end of the war: one which has merely kept pace with general economic expansion by doubling itself every 8-11 years, the other which has skyrocketed by doubling itself every 3-5 years. Life insurance and workmen's compensation fit into the first category, while automobile tort liability, health insurance, and social insurance have enjoyed the more phenomenal growth.

Even though life insurance and workmen's compensation have not changed much in relation to the general growth of the economy and in relation to medical care and death expense, their relative position among reparation systems has slipped markedly, as they have been eclipsed by the other more rapidly growing reparation systems. This can be readily seen from Figure 1-3, which shows the various reparation system benefits as a percent of personal disposable income. Figure 1-4 shows that total benefit payments from these reparation systems have been growing faster than personal expenditures for medical care and death expenses,

demonstrating that a larger percentage of our loss from illness, injury, and death is being replaced from outside sources.

The remarkable growth shown by these systems is only partly a result of increased benefit levels. For the most part, the increase in total benefits for health insurance and social insurance is a result of giant strides in extensions of coverage to more persons, particularly during the late 1940's and early 1950's. In a similar fashion, the sharp increase in automobile tort liability insurance benefits reflects the mushrooming number of automobile registrations and accidents, as well as the higher percentage of automobiles

FIGURE 1-4—CUMULATIVE REPARATION, MEDICAL EXPENDITURES AND ACCIDENT COSTS AS PERCENTS OF DISPOSABLE PERSONAL INCOME, 1940-1960



with liability insurance today (roughly 85 percent) compared with twenty years ago (roughly 50 percent). But the average claim has been increasing in size too, although not quite as much as the cost of medical care. For example, "the average bodily injury basic limits claim has increased from \$663 in 1955 to \$753 in 1959,"¹⁰⁸ an increase of almost 14 percent, while during this same period the consumer price index for medical care items rose by 18 percent.¹⁰⁹

Undoubtedly many of the forces influencing the growth of several of these major systems have little to do with the direct problems of injury reparation, and they will grow further or wither on the vine for reasons largely extraneous to this study. But the growth of these various systems is not inexorable. Their rates of growth can be promoted, discouraged, or neglected by a society aware of the choices before it. There remains a large area that can be influenced by lawyers, insurance executives, judges, economists, and legislators concerned with injury reparation. The various systems can be coordinated in a more coherent fashion, and rational choices can be made to promote the types of reparation systems which best solve the particular problems of society in this area. Past experience indicates that the solution will be pluralistic rather than monistic.

¹⁰⁸ C. Robert Morris, Jr., "Enterprise Liability and the Actuarial Process," 70 *Yale Law Journ.* (Mar. 1961), 554, 567.

¹⁰⁹ Source: United States Department of Labor, Bureau of Labor Statistics, reprinted in *Source Book of Health Insurance Data*, 1961, p. 55.

CHAPTER 2

Functions of Reparation Systems

INTRODUCTION

In order to think effectively about the diversity of reparation systems and what they accomplish, it may be useful to attempt an analysis of the functions which might be desired in reparation systems and to note how these functions seem to be served at the present time.

One may start by asking why reparation should be made at all; a dozen ideas come quickly to mind. "Justice" and "fairness" may lead the list and will as quickly be laid aside as one recalls the endless disputes about what is just and fair. To some observers, justice imperatively demands a negligence standard, while the negligence standard is just as clearly unjust in the minds of others. Furthermore, a little investigation reveals that there is no unanimity among civilized countries, nor among advanced and industrialized countries, nor among Christian and free-enterprise countries, about what is "just" or "fair" in this sphere. In any event, "justice" seems to be a package of ideas which can be better understood if they are pulled apart and examined one by one.

It would be easy to list twenty or thirty distinguishable objectives of reparation, but it will probably prove more useful to present a smaller number of categories under which functions may be grouped and to employ concepts broad enough to accommodate items more numerous than can be detailed here. To this end, reparation functions will be discussed under the following headings:

1. Conferring benefits on injury victims and their families
2. Allocating the burdens of reparation

3. Economy of operation
4. Satisfying the popular sense of justice

As these functions are examined, it may help to remember that "reparation" is not the totality of actions that may be taken in regard to automobile accidents. Injury victims may employ doctors and hospitals, and take off time from work in order to recover with no "reparation" at all; in such cases they pay from their own past or future savings, or by foregoing other satisfactions. Careless drivers may lose their licenses, and even be locked up in jail, without any "reparation" taking place.

"Reparation" occurs when the primary victim of the accident gets some of his economic loss made good by somebody else—by the guilty driver, by the unpaid doctor, by the taxpayers who support the public hospital, or by the insurance company which has insured the victim against injury or the guilty driver against liability. It may take place with or without any mitigation of accident consequences. Money paid to an injury victim is "reparation" whether he uses it to heal his woe, or donates it to the Red Cross, or invests it in a sweepstakes ticket. This variability in the possible consequences of reparation prompts the inquiry into what functions are performed in practice by existing reparation systems.

A. BENEFITS TO INJURY VICTIMS AND THEIR FAMILIES

Reparation systems may benefit injury victims in a great variety of ways: by furnishing medical treatment, by paying medical bills, by supplying vocational rehabilitation, by supplying weekly payments to replace wages, and by furnishing lump sum payments which may be designed to compensate for past wages, future wages, or for psychic losses such as pain, humiliation, and loss of companionship. For purposes of workmen's compensation, whether by commissions or by courts, it is common to classify these various kinds of benefits by their form, as "medical benefits," "weekly benefits," and "lump sums." For tort suits, damage pay-

ments may be classified by the kind of loss that justifies them—"medical," "wage loss," or "pain and suffering."

The present purpose is not to distinguish between elements of a single reparation system (weekly payments vs. lump sum), but to describe the essential differences among reparation systems—the things that differentiate social security from workmen's compensation, or distinguish voluntary direct loss insurance from tort law. For this purpose, it is more useful to draw distinctions based on the social objectives of reparation. To this end, variations in benefit patterns will be discussed under these headings:

1. Restoring the injury victim to his job and to other aspects of effective living ("restoration");
2. Maintaining a minimum standard of living for the injury victim and his dependents ("subsistence");
3. Otherwise bringing the economic and psychic welfare of the victim to pre-injury levels ("loss equalization").

1. *Restoration*

Whether one is moved by sympathy for the individual injury victim and his family, or by a desire to maximize the victim's contribution to the Gross National Product, the function of restoring the injury victim to effective working and living must be placed in the first rank of social objectives. The means which will help most to these ends are primarily medical, starting with emergency first aid, including curative treatment, and perhaps concluding with prosthetic equipment and psychiatric treatment. In a limited number of cases (which probably ought to be increased) there are benefits by way of vocational training for new occupations. Rarely, there may be need for restoration of property, such as a salesman's car.

It is not easy to draw the line between medical treatments which tend to restore the patient to effectiveness, and those which merely ease pain, diminish humiliation, and prolong an economically unproductive life, except in the case of persons who have passed retirement age. For present purposes, there seems to be no need to

draw such a line, and all medical treatment will be assumed to be restorative.

The first and most important question is whether injury victims get the treatment that they need, regardless of how it may be paid for. The answer which appears from the Michigan survey is that in the overwhelming majority of cases they do. In none of the sampled cases did it clearly appear that emergency and curative treatment during the period of acute distress had been lacking. About 14 percent of the serious injury subjects were dissatisfied with some aspect of their medical care, but only about 3 percent reported that they would forego future treatment which they needed because of expense.¹ However, it seems likely that in many cases where victims did not report unmet needs, further rehabilitation would be possible. This is suggested by reported experience under rehabilitation programs which have been set up for victims of industrial accidents.²

In view of the high desirability of restoration, both from individual and from social points of view, it is of special interest to consider how reparation systems tend to secure it. The first thing to notice is that a good deal of restoration is achieved without any reparation. A great many people pay a great many medical bills out of their own current income or their savings. Medical care for acute conditions is probably one of the consumption goods which gets highest priority in a pinched budget.

Among the various forms of reparation, there can be little doubt that the one which contributes most to restoration is medical (including hospital) insurance. Its benefits are not transmutable into any other means of satisfaction; doctors and hospitals are

¹Based on questions asked of serious injury victims or members of their families, as more fully explained in Chapter 9 of this report.

²See Earl F. Cheit, *Injury and Recovery in the Course of Employment* (New York: John Wiley & Sons, 1961), pp. 281-380; George Armstrong and others, *New York University Workmen's Compensation Study* (New York University Center for Rehabilitation Services, 1960), p. 64; Edward M. Krusan and Dorothy E. Ford, "Compensation Factor in Low Back Injuries," *Journ. Am. Med. Ass'n*, Vol. 166 No. 10 (1958), p. 1128.

fairly sure of its availability and its extent, without having to speculate on the results of bargaining or litigation; it is usually paid promptly.

Medical insurance now covers nearly three fourths of all Americans in one form or another, but is sometimes available only on condition of hospitalization.³ The Michigan survey indicated that about 50,000 automobile injury victims incurred medical expense in 1958, while only about 20,000 received reparation from medical insurance. Medical insurance appears in a variety of forms; in individual policies, in group policies taken for a class of employees or the members of a club, and as a line of coverage in a policy primarily designed for other risks. Illustrating the latter are the "medical benefits" clauses frequently carried in today's automobilists' or landlords' liability insurance policies.

Medical benefits may also be supplied under workmen's compensation liability laws. For those who benefit from them, they are one of the best forms of reparation, since the medical service is often furnished very close to the scene of the injury, and is commonly supplied without limiting its cost.⁴ Its only shortcoming is that it is limited to workmen injured in the course of their employment, and then only if they work for certain kinds of employers.⁵ Among the 50,000 subjects of automobile injuries who incurred medical expense, only about 700 received benefits under the workmen's compensation law.

A third form of reparation which contributes to personal restoration is "free" medical care—care that is not paid for by or on behalf of the patient. Of the serious injury victims in the Michigan survey, 4 1/2 percent reported receiving "free" medical or hospital care. While these reports referred to care for which no charge was intended, there is also care which becomes "free" because the

³ See Chapter 1, note 41.

⁴ See generally Cheit, *Injury and Recovery in the Course of Employment*, pp. 27-60.

⁵ Arthur Larson, *The Law of Workmen's Compensation* (New York: Matthew Bender & Co., Inc., 1952), pp. 41-48.

recipient never pays the bill for it. This is a natural result of the fact that hospitals and doctors accept emergency cases without determining whether the patient is able or willing to pay.

In addition to care which the parties would describe as "free," there is care so heavily subsidized as to make it economically equivalent to free care. In one of the surveyed cases, a small boy sitting in the front seat of a car fell forward and cut his head on the instrument panel as the result of a collision. He was taken to a public hospital in an ambulance, anesthetized, and given several stitches in the head by a surgeon, for a total charge of five dollars.

Care of this sort, administered without charge, or at a very low charge, or without collecting charges which may be made, contributes greatly to assuring the restoration of injury victims. Since the care is eventually paid for by someone, it is a form of reparation by which injury losses are shifted from the injured person to taxpayers, to the patrons of charities, to uncompensated doctors and nurses, or to the paying customers of medical services, whose bills may include compensation for services rendered to those who do not pay.

As means of assuring restoration through medical care, one would probably list tort law at the end of the list of reparation sources. This is because the tort settlement generally waits until after the permanence of the injury is definitely known, which means after most of the medical treatment has been given.⁶ Tort law settlements then reimburse the injury victim, his survivors, or his insurance company for the medical care which has been paid for. But the question whether any settlement will be paid normally remains doubtful until the sum is in hand; the possibility of reimbursement can not exercise a very strong influence on the rendering of the necessary service.

It might be suggested that the tort settlement proceeds would be useful in obtaining the medical services needed by permanently

⁶ For an analysis of time from injury to tort settlement, see Chapter 6 of this study.

disabled persons after the settlement has been received. Undoubtedly it is so used in some cases. However, the time for most effective treatment may have passed; in any event, the injury will no longer be acute, and medical treatment may have become "elective." Medical treatment will therefore compete on no better than equal terms with debts, family subsistence, and deferred pleasures. An earlier study of the use of settlement funds for railroad injuries did not make any mention of use for subsequent medical treatment.⁷ A study of lump sums paid for workmen's compensation in Michigan indicated that a significant fraction of settlements was used for medical expenses, but did not show whether these were past or future expenses.⁸

Turning from medical care to vocational rehabilitation, it appears that there is very little tendency for any of the prevailing types of reparation for automobile injuries to bring about rehabilitation. In industrial accidents, the laws of a few states provide for employers' liability for rehabilitation costs, and some insurance companies publicize their rehabilitation programs. Although tort law theoretically would provide the costs of rehabilitation, its actual effect is probably to disfavor it. Pending the settlement, the injury victim's impulse to be rehabilitated conflicts with his desire to prove the highest possible degree of disability. After the settlement, there is no mechanism for channeling the proceeds toward a rehabilitation program, rather than toward paying debts, buying a car, or other purposes which press more strongly on the victim's consciousness.⁹

Restoration via replacement of property presents no major problems, but may merit passing attention. If the property is a car, there is a good chance that the replacement may be made from collision insurance, less a "deductible" amount. If there is no

⁷U. S. Railroad Retirement Board, *Work Injuries in the Railroad Industry, 1938-1940* (Chicago, 1947), Vol. 1, pp. 166-76.

⁸James N. Morgan, Marvin Snider, and Marion J. Sobol, *Lump Sum Redemption Settlements* (Univ. of Michigan, Ann Arbor, 1959), pp. 96-104.

⁹Compare Cheit, *Injury and Recovery in the Course of Employment*, p. 299.

applicable collision insurance, the victim's principal hope lies in getting a tort settlement. This hope is subject to the hazards of proof of negligence, and of freedom from contributory negligence. Assuming that these can be surmounted, it is still doubtful that the tort settlement will arrive in time to fill the victim's need, since the settlement for property damage and personal injury are generally made in a single package, which is slow in coming. When the tort settlement arrives, it may help to pay the mortgage on a car previously purchased, or to replenish savings spent for a car, but it is fairly unlikely to be the direct means of restoring the injury victim to vehicular mobility.

2. *Subsistence*

A second function of reparation systems which deserves separate attention is maintaining the injury victim and his dependents at some level of subsistence which is designed to maintain life and health, but which may be deliberately set below the normal standard of living. Although this function may be regarded as an integral part of the entire process of loss shifting, it deserves separate attention because impoverishment below the subsistence level is believed to have multiplier effects which do not apply to relative impoverishment at higher levels; disease, family disintegration, and crime are associated with substandard subsistence. Whether or not this is true, levels of support which are less than pre-injury wages have been deliberately chosen as the objectives of some of the most extensive reparation regimes, such as workmen's compensation and social security.

Fortunately, there are a great many cases in which subsistence is not a problem. One may assume that when the injured person is not gainfully employed, subsistence is unaffected by the accident; this eliminates about 46 percent of all the injury cases. In cases where the victim is employed, subsistence can probably be supplied from savings, or from borrowings against future earnings,

without outside reparation, for a limited period. But where a severe injury is suffered by a wage earner it is likely that subsistence will eventually suffer unless reparation is supplied from some outside source. The Michigan survey indicated that in 1958 about 4500 employed persons suffered injury losses amounting to over \$1000 apiece; many of these would be likely to have some need for reparation to maintain subsistence.¹⁰

When the subject is a wage earner, the first source of subsistence is likely to be sick leave.¹¹ In a small fraction of cases, the victim's injury is so connected with his work that he becomes entitled to workmen's compensation.¹² Unlike sick leave, which may pay the full regular wage, workmen's compensation is a true subsistence program, never paying more than a stipulated fraction of the regular wage, and subject to arbitrary maximum dollar limits, which may vary according to the number of dependents, and which are usually well under the average wage of industrial workers.

If the worker proves to be totally and permanently disabled, he will be qualified after six months to a social security pension just as if he were over sixty-five.¹³ Like monthly benefits under workmen's compensation, it is deliberately established as a fraction of the former wage, with a fairly low ceiling.¹⁴ If none of these programs are available, actual starvation will probably be prevented by public assistance and charity. In any event, savings while they last are likely to be drawn on to fill the waiting period

¹⁰ For distribution of injury victims by age and family income, see Figures 5-3 and 5-4, *infra*, Chapter 5.

¹¹ Of 86,000 injury victims who suffered some economic loss, about 25,000 received sick leave pay or other compensation from their employers.

¹² Of 86,000 injury victims who suffered some economic loss, approximately 700 received workmen's compensation benefits.

¹³ The Michigan survey showed about 600 social security beneficiaries out of 86,000 injury victims with some economic loss. It is probable that the questionnaires, mostly answered in 1960, did not reflect potential benefits under the 1960 amendment of the Social Security Act to embrace permanently and totally disabled persons under the age of 55. U. S. Public Law 86-778, approved Sept. 13, 1960, amending Social Security Act §§ 401, 402 (42 U. S. Code §§ 401, 402).

¹⁴ Social Security Act §§ 401 ff. (42 U. S. Code §§ 401 ff.)

before other benefits attach, and to supplement the meager levels of subsistence supplied.¹⁵

Tort settlements are measured in part by lost wages, and are therefore designed in part to supply a fund which would include subsistence, but they become direct sources of subsistence to a very limited extent. Between the time of injury and the time of the tort settlement, the tort settlement is obviously unavailable; it is too uncertain even to furnish a base of credit.¹⁶ After the settlement, it might conceivably furnish subsistence for the remainder of the time needed, but other studies of lump sum settlements indicate that they are often spent in a lump sum, just as they are received.¹⁷ That does not mean that they are wasted; they may be well spent in buying a home or a chicken farm, but they are seldom used to supply directly the amounts needed to feed and clothe a family week by week, or to purchase annuities.

3. *Loss Equalization*

After every effort has been made to restore an injury victim to effective living, and to supply subsistence to his family, huge losses still remain uncompensated. The function of making up these losses so as to render the victim as "well off" as he was before will be called "loss equalization."

The most obvious among the losses which call for equalization is wage loss above subsistence levels. For a worker at a very low wage, loss beyond subsistence would be small; as the wage rises,

¹⁵ The U. S. Railroad Retirement Board study of railroad injury victims concluded that "It is clear that on the whole, the reliance on sources of income that imply critical situations is not very great. It is estimated that about two thirds of the employees or survivors . . . are able to manage either entirely or principally on savings, insurance, and related sources." *Work Injuries in the Railroad Industry, 1938-1940* (Chicago, 1947), Vol. 1, p. 166. For some case studies of how injured workmen and their families adjusted to reduced income, see James N. Morgan and others, *Lump Sum Redemption Settlements*, pp. 82-100.

¹⁶ On time intervals between injury and settlement, see Chapter 6 of this report.

¹⁷ For case studies of dispositions of lump sum settlements, see U. S. Railroad Retirement Board, *Work Injuries in the Railroad Industry, 1938-1940*, pp. 166-76;

the loss beyond subsistence becomes progressively greater. Other economic losses may be suffered through destruction of clothing and property which are not necessary for work. Again, the magnitude of the loss is likely to rise with the income level of the accident victim.

In addition to these easily measured economic losses, there are others which certainly exist, but are just as certainly immeasurable. A disabled salesman loses customers, or opportunities to make new ones; his sales will be less even after he is fully "restored" to serviceability. A workman loses an opportunity for promotion. A child loses education, and the opportunities for prospective advancement which education would have conferred.

Even more problematic than the economic losses beyond subsistence are the psychic losses: the pain and suffering of the injured persons; the loss of companionship felt by a family member when another member is lost; the loss in example and guidance suffered by a child who loses a parent. There is no known scale for transmuting these losses into money, yet juries are somehow supposed to do it.

A remarkable feature about these losses is that they are so generally neglected by reparation systems other than tort law. A small part is cared for by voluntary direct loss insurance. Collision insurance will buy the victim a new car. In rare cases, accident insurance (such as a musician's insurance of his hands) may reimburse a part of the earnings loss, and could even exceed it. Life insurance could be carried to such an extent that it would eliminate any economic loss to survivors. But it is obvious that the amount of insurance carried by most people is inadequate to provide even subsistence, and merely provides a slender supplement to social security or public assistance.¹⁸ The only important exception occurs among retired wage earners, where death occa-

James N. Morgan and others, *Lump Sum Redemption Settlements*, pp. 100-104.

¹⁸ See *Life Insurance Fact Book, 1961* (New York: Institute of Life Insurance), p. 11, showing that the average amount of life insurance per family is between one and two times the average annual disposable income per family.

sions no loss of earnings. Although death in such cases usually triggers the termination or diminution of a pension, it is not improbable that life insurance benefits may equal the loss.

Loss equalization remains therefore the virtual monopoly of tort law. To abolish the tort system without radical expansion of other systems would leave the injury victim with little more than restoration and subsistence.

Without deciding at this point whether loss equalization is or is not a sound public policy, it is appropriate here to note the unevenness with which losses are equalized even under tort law. The fact of loss is not enough to call for loss shifting; the victim must be innocent, there must be a guilty causer of the loss, and the victim must have means of proving the guilt and the causation. Hence many injury victims receive no tort settlement and no reparation beyond restoration and subsistence. Other victims, who are more favorably situated with respect to proof of negligence, receive compensation which exceeds not only their medical treatment and lost wages, but their total economic loss. These variations were sharply outlined by results of the Michigan automobile accident survey.¹⁹

B. ALLOCATING THE BURDENS OF REPARATION

In the welfare-minded society of today, it is easy to rationalize the conferring of benefits; it is harder to find satisfying reasons for the allocation of burdens.

One of the ideas that will first come to mind (at least, after abandoning "justice" and "fairness") is "placing responsibility," which may be further identified as "moral responsibility," or "social responsibility." All these terms seem to be susceptible of further definition, and further analysis will be attempted under the headings of:

1. Punishing the guilty
2. Deterring negligent conduct

¹⁹ See Chapter 6, *infra*.

3. Social cost accounting (putting a price on injurious activities)
4. Loss redistribution or spreading ("shifting losses" to those "more able to pay")
5. Linking of benefits and burdens

1. *Punishing the Guilty*

It is hard to get far in a discussion of injury law without meeting the idea that the wrongdoer who caused the loss should somehow be made to suffer. To a few, this proposition is self-evident and requires no further explanation. Others will ask, "why punish"?

One answer lies in the direction of revenge. It may be said that society demands vengeance; that the injury victim and his friends feel the need that the wrongdoer should suffer just as keenly as they feel the need that the innocent victim should be cured and rehabilitated.²⁰ Certainly this state of mind is observable in many litigants, although it is not easily separated from a desire for monetary compensation. Perhaps the same phenomenon could be made more acceptable to a modern conscience by giving it the name of "commiseration." Something in human nature demands that if one person has been made to suffer, others (and particularly the causes of it) should be made to suffer with him.

Whatever may be thought of the punishment objective, it is one which has known better times. Historical studies have revealed that tort law grew out of criminal measures whose sole object was to punish, and the principles of primary and contributory negligence seem to have arisen from a desire to make the guilty pay, and to prevent the guilty from collecting any payments.

On the other hand, it is clear that the law has moved consciously and unconsciously away from the goal of punishment. Most damages are not punitive, but compensatory; they are measured not by the offensiveness of the defendant's conduct, but by the amount of the plaintiff's loss. It is widely acknowledged that many negligent

²⁰ See Oliver Wendell Holmes, *The Common Law* (Boston: Little, Brown and Co., 1881), pp. 5-35.

claimants succeed in collecting tort settlements, thus escaping the forfeiture which the tort law designed for them.²¹ Guilty defendants are likely to escape financial punishment either by carrying liability insurance, or by being judgment-proof. States such as New York and Massachusetts, which require every driver to insure,²² seem determined to take the punishment out of tort.

The punishment objective of tort claims is served only in the rare cases in which a defendant with assets from which to pay carries inadequate insurance, or in which by reason of deliberate wrongdoing insurance coverage is unavailable.²³

Leaving tort law behind, one finds no vestige of the punishment theme in other reparation regimes. Workmen's compensation laws, for example, require insurance (or evidence of ability to self-insure) on the part of everyone who is made liable, so that liability can never be punitive.²⁴ The role of punishment for causing personal injuries is now virtually separated from reparation systems, and persists chiefly in fines and jail sentences.

2. *Deterrence of Negligence*

An objective which is closely related to punishment but which appeals more to the modern mind is the deterrence of negligence. Tort law may well be viewed as a negligence deterrent. It purports

²¹ Roger Bryant Hunting and Gloria S. Neuwirth, *Who Sues in New York City?* (New York and London: Columbia University Press, 1962), pp. 94-97. Joseph N. Ulman, *A Judge Takes the Stand* (New York: Knopf, 1933), p. 31; Wm. L. Prosser, *The Law of Torts* (2nd ed.; St. Paul: West, 1955), p. 296. However, Fergus Markle, Esq., who was appointed by the Michigan State Bar to be an observer of this research project, declares that the statement in the text is contrary to his observation and experience.

²² Mass. Gen. Laws ch. 90, § 34 A-B (1949). N. Y. Vehicle and Traffic Law (McKinney, 1960) § 312. "No motor vehicle shall be registered in this state unless the application for such registration is accompanied by proof of financial security which shall be evidenced by a certificate of insurance. . . ."

²³ Frank W. Woodhead, "Insurance Against the Consequences of Wilful Acts," *Insurance Law Journ.*, Vol. 310 (1948), p. 867. See Cal. Insurance Code § 533: "An insurer is not liable for a loss caused by the wilful act of the insured, but he is not exonerated by the negligence of the insured,"

²⁴ Cheit, *Injury and Recovery in the Course of Employment*, p. 13. Larson, *Law of Workmen's Compensation*, pp. 2, 146-52.

to impose burdens only on those who are found guilty of negligence, and to confer benefits only on those who are free from it.²⁵

Without quarreling with the validity of the objective, one must recognize a number of current doubts about how far tort law achieves it. One set of doubts relates to the extent to which defendants' states of mind cause accidents. If accidents are caused by conscious indifference, threats of liability may make a difference. Some accidents may be caused by excessive nervousness or panic, which would be increased rather than diminished by threats of liability. Some accidents are probably caused by poor coordination and reaction time, or by irrational responses to emergency; such accidents are totally unaffected by imposing liability. Other accidents probably result from peculiar coincidences which are bound to produce a certain number of collisions per million car-miles even between careful drivers.²⁶

Conceding that fear of liability may not affect the conduct which immediately precipitates accidents, the possibility remains that fear of liability may have an effective role in inducing "safety practices" which would make accidents less likely. It might, for instance, influence persons against taking trips on New Year's Eve, Independence Day, or Labor Day, and probably reinforces many owners' unwillingness to loan cars to less careful friends, or to inexperienced youths. But even here, the fear of liability is likely to be overshadowed by the owner's desire to save himself and his

²⁵ Fowler V. Harper and Fleming James, Jr., *The Law of Torts* (Boston: Little, Brown and Company, 1956), Vol. 2, pp. 744-58; William L. Prosser, *Handbook of the Law of Torts* (2nd ed.; St. Paul: West Publishing Co., 1955), pp. 14-20.

²⁶ Fleming James, Jr., and J. J. Dickinson, "Accident Proneness and Accident Law," *Harvard Law Review*, Vol. 63 (1950), pp. 769-95; Fleming James, Jr., "Accident Liability: Some Wartime Developments," *Yale Law Journ.*, Vol. 55 (1948) 549; Harper and James, *The Law of Torts*, Vol. 2 at 734-41; Eric Farmer and E. G. Chambers, *A Study of Accident Proneness Among Motor Drivers*, (London: Stationery Office, 1939); F. M. Newbold, *A Contribution to the Study of the Human Factor in the Causation of Accidents* (London: Stationery Office, 1926); Farmer and Chambers, *A Study of Personal Qualities in Accident Proneness and Proficiency* (London: Stationery Office, 1929).

car from harm, and by his horror of being an instrument in causing tragedy to another human being.

A second set of doubts about deterrence by tort law relates to the effect of insurance on the tort deterrent. Approximately 85 percent of America's automobile owners appear to be covered by liability insurance;²⁷ presumably, they carry as much insurance as they consider necessary to cover their risks. Since the increased cost of higher policy limits is relatively slight, it seems more probable that persons would increase their insurance coverage than that they would change their driving habits if fear of liability were their motive force. It would seem that the liability fear could furnish a safety incentive only for those who are too poor to insure. Many of such persons must also be too poor to have much to lose by liability.

On these assumptions, few if any drivers think of their driving habits as exposing them to liability. But the 85 percent who carry insurance may think of their driving habits as exposing them to higher insurance costs. Since insurance companies are likely to refuse to renew policies, or to charge higher rates for accident frequency, drivers may have a desire to avoid accidents in order to keep their insurance in force at minimum rates. This fear would seem to be much less compulsive than the fear of a ruinous liability for damages; it would not necessarily be less effective in reducing accidents.

If tort law does encourage care in driving, it evidently does not, in the minds of the legislators, exhaust the possibility of putting pressure on drivers. The suspension of drivers' licenses for repeated violations and for failure to pay judgments (under "financial re-

²⁷ This figure is a rough median of the proportions insured according to report of the sub-committee appointed to study the proposed automobile accident commission plan to the automobile insurance law committee of the American Bar Association, Aug. 30, 1960, Appendix A. In the Michigan Auto Injury Survey, reported in Part II, 14 percent of serious injury victims reported that the person responsible for the accident was uninsured.

sponsibility laws") have been added as additional incentives.²⁸ Among the students of accident prevention, the possibilities of strengthening these types of pressure are generally valued a good deal higher than the possibilities of strengthening the tort weapon.²⁹ It is perhaps significant that the Michigan Highway Department posts road signs saying "Drunk Drivers Go To Jail," but never yet "Drunk Drivers Pay Damages."

This does not mean that tort law is valueless. In fact, it is normally the tort law which triggers the license suspension under financial responsibility laws.³⁰ If tort actions were abolished or severely diminished, the license suspensions which result from unpaid judgments would also fall by the wayside, and a presumed deterrent to negligence would be lost.

Even the license suspensions which result from repeated traffic law violations (without any tort action) may be indirectly aided by tort law. It is widely known or believed that police records have a great deal to do with the terms of settlement of injury claims.³¹ A ticketed defendant is virtually sure to make some sort of settlement

²⁸ Mich. Stat. Ann. § 9.2020 (suspension or revocation of license of unsafe driver); §§ 9.2211-9.2212 (failure to satisfy judgment; suspension of license). As of 1953, 23 states had adopted "security-responsibility" laws. See New York Assembly Interim Committee on Finance and Insurance, *Semifinal Report, Automobile Compensation Insurance*, No. 3 (1953), p. 83.

²⁹ See Franklin M. Kreml, "Police, Prosecutors, and Judges," *Annals of Am. Acad. of Pol. and Soc. Sci.*, Vol. 320 (1958), pp. 42-52; James Stannard Baker, "Driver Licensing," *id.* pp. 53-62.

³⁰ Under the former New York Law, and the proposed uniform law on financial responsibility, the judgment which results in suspension of license must be in connection with operation and ownership of an automobile. See N. Y. Sess. Laws 1936, ch. 448; *Reitz v. Mealey*, 314 U. S. 33 (1941) upholding N. Y. Statute. National Committee on Uniform Traffic Laws and Ordinances, *Uniform Vehicle Code* §§ 7-303, 7-310 (1956). The Michigan financial responsibility provides for license suspension by reason of non-payment of "any judgment": Mich. Stat. Ann. § 9.2211; cases do not disclose whether "any judgment" refers exclusively to judgment resulting from the use, ownership, and maintenance of a motor vehicle.

³¹ The report itself is not ordinarily admissible in evidence, but the police officer who made it may be called as a witness, and may use it to refresh his recollection. C. T. McCormick, *Handbook on the Law of Evidence* (1954) § 149. Note, "Admissibility of Contents of Police Officer's Accident Reports," *Minn. Law Review*, Vol. 36 (1952), p. 540. Insurance officials have told the writer that in practice accident claims in Michigan are generally settled in reliance on the police report as to cause of the accident and negligence of the parties.

in favor of an unticketed plaintiff. Therefore, an innocent party to an accident has a private incentive to supply police with any information which would tend to throw fault upon other parties. In the absence of the tort claim incentive, many motorists might think it more sporting to have no memory of fault-implicating aspects of the accident. How many motorists draw such sophisticated distinctions is not known.

From these considerations, it appears that tort law probably furnishes important incentives to avoid involvement in accidents involving injury to others, and to avoid conduct which will be charged as negligent, even if it does not unfailingly punish the guilty and limit its reward to the completely innocent.

None of the other reparation systems appears to furnish an equal incentive in this direction. Workmen's compensation doubtless furnishes an incentive to employers to minimize injuries to their own employees, but their incentive to minimize injuries to others *by* their employees must reside elsewhere. As for life insurance, social security, and public assistance, the effect of injuring another on one's own taxes or insurance premiums is infinitesimal.

Therefore, any proposal to eliminate the tort remedy from any area of accidents would call for a close examination into the sufficiency of the other incentives to injury avoidance. At the same time, it cannot be said that minor changes in the tort pattern, by increasing or decreasing the damages, or by relaxing or tightening the negligence standards, are likely to affect significantly the pressure which the ordinary citizen presently feels to avoid injuring others.

3. *Social Cost Accounting*

Since the edge of deterrence has been blunted by liability insurance, a new rationalization of liability for reparation has come into view—the idea that each consumer good should bear the true price of its production, including the human carnage which it has caused. This idea was first advanced in connection with

workmen's compensation laws, when it was said that "the price of the product should bear the blood of the workers."³² More recently it has been invoked to show that automobile drivers should pay the price of automobile driving, including the costs of accidents caused.³³

This is not the place to question the soundness of the objective (which is explored in the next chapter), but merely to see how the function is performed in existing reparation systems. It is best observed in workmen's compensation law, where the losses of the workers are shifted to the employers and by them, presumably, to the consumers of the products made by the covered workmen. Industries with higher injury rates will naturally make allowance in their prices for higher workmen's compensation payments (or for higher premiums on workmen's compensation insurance), so that the consuming public may choose cheaper goods, which cause less human carnage; or, if they prefer goods whose manufacture occasions more injuries, must pay more for them.

With the aid of liability insurance, tort law seems to work similarly. Automobile owners pay insurance premiums which are used to pay the losses of automobile victims—pedestrians and passengers. Owners of vehicles such as business cars and trucks, which cause a particularly large amount of damage, pay particularly large premiums. In this way the ownership of a car is made to reflect the losses which vehicles of its class are likely to inflict on others. Although the system involves some waste motion in collecting money from the same people to whom losses will be paid (e.g., family car owners), it also has considerable success in mak-

³² Ascribed to Lloyd-George by Dean Prosser, *Law of Torts* (St. Paul: West, 1941), p. 519. For a classic statement of the same theory—in milder words—see E. H. Downey, *Workmen's Compensation* (New York: Macmillan Co., 1924), pp. 8-9, 15-19. See also Bausman, J., in *Stertz v. Ind. Ins. Comm. of Washington*, 91 Wash. 588, 590, 158 P. 256, Ann. Cas. 1918B, 354 (1916).

³³ Report by the Committee to Study Compensation for Automobile Accidents (Philadelphia: Columbia University Council for Research in the Social Sciences, 1932), p. 217; Guido Calabresi, "Some Thoughts on Risk Distribution and the Law of Torts," *Yale Law Journ.* Vol. 70 (Mar. 1961) 499, 500.

ing auto owners as a group pay for the injuries of pedestrians as a group, and in making those whose cars are driven more (the business car owners) pay for the injuries of those whose cars are driven less (the family car owners). The geographic differentiation of rates also serves to put a higher price on car ownership in urban areas, where injuries per car are more numerous than in rural areas.³⁴

A more limited form of social cost accounting is observable in most systems of voluntary direct loss insurance such as life, accident, hospital and medical, and automobile collision. In these systems, the recipients are those who have voluntarily paid premiums (or those named as beneficiaries by the premium payers), and the only contributors are those who expect that they or their appointed beneficiaries will receive benefits. To the extent that underwriters charge different premiums for different classes of risk these systems also tend to place a price on more dangerous activities. People who spend most of their time in airplanes pay higher life insurance premiums, and certain types of cars presumably pay more for collision insurance. But these effects are very limited. The underwriters cannot place any greater burdens on premium payers than they will voluntarily assume by buying high-priced insurance. This fact limits the underwriters to pricing up activities in which

³⁴ To illustrate the wide differences in liability insurance rates for cars used in different ways and different places, one may compare the following rates stated in the Manual of Automobile Insurance Rules and Rates (New York: National Bureau of Casualty Underwriters, 1960, with 1962 supp.):

	District 18 (Brooklyn)	District 49 (Niagara County, excluding city of Niagara Falls)
Class 1A	\$147	\$ 47
Class 2C	\$352	\$182
Public livery	\$790	\$179

"Class 1A" refers to passenger cars not used for business nor for driving to and from work, and not driven by a male under 25.

"Class 2C" refers to passenger cars, regardless of use, of which an unmarried male under 25 is an owner or a principal driver.

These rates are for personal injury liability limited to \$5000 per person injured and \$10,000 per accident, plus property damage liability limited to \$5000 per accident.

their customers habitually engage, and excludes the possibility of their shifting burdens to excavators, fireworks manufacturers, and reckless drivers whose activities may unpredictably bring loss upon a policyholder whose normal life is a model of circumspection.

A complete departure from the aim of social cost accounting is seen in the survivors' and disability benefits of the social security system. Here there is no upward pricing of the greater risks, but on the contrary a design to let the lesser risks share the burden of the greater. Instead of raising the cost of hazardous activities, it raises everybody's cost of living and of doing business.

If social cost accounting is the end to be served, the liability systems of tort and workmen's compensation are the systems to be most preferred. But they should not be allowed to carry off the blue ribbon without some notes on their imperfections as social accounting mechanisms. One group of imperfections relates to the measurement of the losses which are accounted for, and the other to the identification of the people who are supposed to be particularly prone to cause losses.

For the purposes of social cost accounting, the loss which should be borne by the hazardous activity is the *social* loss, which rarely if ever conforms to the amount of the reparation awarded. In workmen's compensation, reparation is arbitrarily limited to medical benefits and subsistence, leaving unrequited a large residual income loss in the case of average or high wage earners. Under tort law, a large amount of loss goes unrequited either because of the negligence principle, or because of lack of insurance, or other factors, so that the total aggregate loss never gets into the accounting.

The other big shortcoming in reparation systems as instruments of social cost accounting relates to the identification of loss *causers*. Liability insurance for an automobile belonging to a young bachelor in Brooklyn costs approximately \$350 a year,³⁵ which is the insurance company's average cost for such an owner. As a

³⁵ See preceding note.

result, it is probable that many poor laborers who would cause very little damage are prevented from owning cars. This happens because insurance companies cannot tell in advance which drivers will cause large amounts of damage, and which will not. They have made bold efforts to identify accident-prone classes, such as unmarried men under 25, but these efforts only increase the unfairness of the system for a person who is not accident prone, but belongs to a class most of whose members are. An interesting attempt to recognize safe classes within unsafe classes is illustrated by the practice of one insurance company which raised premiums for most cars driven by high school students, excepting high school students with high grades. A similar example is the lower rate for those who have completed a driver training course.

Even if workmen's compensation benefits were unlimited, and if tort law ignored negligence, reparation under these systems would fall short of social loss for other reasons. One of these reasons is that the systems focus on individual loss and ignore social loss. When a workman is disabled, his individual loss is the reduction in his take-home pay, but the social loss includes also what he would have contributed to the common good by the income tax. His individual loss also excludes the social cost of training a new workman to take his place, or of putting up with an inexperienced workman until the replacement is as skilled as his predecessor. Another reason is that the losses for which reparation is paid must be those of identified losers. If a young bachelor is killed, the demonstrable individual loss is minute, because no one knows which woman would have benefitted from his survival; yet the social loss includes what he would have contributed to her.

Despite all these efforts, it remains obvious that the social cost accounting functions put a high cost on driving, without adequate allowance for the actual differences in accident probabilities. A comparison might be drawn with a cost accounting system for General Motors which would attribute an average manufacturing cost to each car, whether it were a Corvair or a Cadillac. Yet even

if the system is imperfect, it does not follow that social cost accounting be rejected. That would be comparable to giving away both the Corvairs and the Cadillacs for lack of ability to apportion the costs between them.

4. *Loss Redistribution*

Another distinctly modern objective advanced for allocating the burdens of reparation is that they should be imposed on almost anyone who would suffer less than the original victim would. Two arguments are advanced to explain why one man might wince less than another at a given loss. The first is that one man might be richer, and involves the assumption that the millionth dollar means less to its owner than does the hundredth. A second argument is that people would rather suffer regular losses which are small and predictable than large and unpredictable ones which would be less frequent. For this reason, people buy hospital insurance or collision insurance.

According to the first argument, redistribution confers a benefit by shifting wealth from the rich to the poor, as did Robin Hood. But it would be difficult to defend any of the reparation systems as a Robin Hood, even if one regarded this as an unchallengeable objective. As already noticed, most reparation is paid not by individual tort feasons, but by insurance companies, which collect their premiums from a very large percent of automobile owners, most of whom belong to the same class as do most of the injured.³⁶ Therefore reparation probably causes redistribution from the poorer to the richer about as often as it causes redistribution from the richer to the poorer.

It is true that reparation of injuries to pedestrians, including children, often fits well under the concept of "redistribution" in favor of the poor. So also does reparation of injuries occasioning major permanent disability, which make a

³⁶ Observations on differences between serious automobile injury victims and the Michigan population as a whole may be found in Chapter 5.

poor man of one who was well situated before. Unfortunately, in this last group of cases the system does not work very well because the victim's losses are frequently above the capacity of the system to pay. The failure of all systems of reparation to redress really large losses is discussed later, in Chapter 5.

The second view of redistribution—that frequent little losses are preferable to infrequent big ones—furnishes a somewhat better basis for justifying contemporaneous reparation systems. Following this view, one may regard “redistribution” as the function of pulverizing the losses and sprinkling them on everybody, instead of letting them fall in heavy chunks on a few unfortunate victims. This is the effect of the social security system, as it operates on injury victims. The burden of the reparation is spread over the entire working population, without any regard to whether those who bear it are more or less likely to participate in the system either as losers or as loss-causers. Life insurance is also a pulverizer of loss, although its burdens are sprinkled only on those who choose to participate.

Collision insurance also operates as a loss pulverizer, spreading losses equally among large numbers of automobile owners through the premium device. But since collision losses are fairly low (compared with personal injury losses) it is probable that very few policyholders eventually take out any more than they pay in over a period of years. For them, the spreading effect is more of a spreading over the years than a spreading among persons. But collision insurance is more selective than social security, because only automobile owners (and not all of them) contribute, and because they are rated to contribute in very different amounts, varying according to their supposed risks.

The tort law system, in spite of its objective of placing loss on the guilty cause, in fact operates partly as a pulverizer of loss, when placed in tandem with the liability insurance system. A great deal of what goes on is simply the payment of losses to one premium payer from the funds contributed by other premium

payers of the same class; for instance, when a man's automobile liability insurer pays a claim to a neighbor who buys insurance at the same rate. But this is not all that happens. There are a great many classes of premium payers, paying different premium rates, and for this reason tort law coupled with insurance achieves several objectives beyond loss-spreading.

In the absence of insurance, tort law rarely effects pulverization. Most frequently, it effects no shift at all, because most uninsured tort feasons are too poor to pay from their own pockets. When one uninsured individual does compensate another, the primary effect is merely a *shifting* of loss in a large chunk. But when the person compelled to pay is a corporation, there is a sharing of the loss at least among all the shareholders. And if the liability is regarded as recurring, there will probably be a more diversified shift by adding the payment to the costs of production, raising the price of the product, and collecting more from the ultimate consumers.

Workmen's compensation has been so carefully designed as an instrument of social cost accounting that it seems reproachful to accuse it of mere loss-pulverization. However, it probably "pulverizes" to a limited extent, where insurance premiums do not reflect the full costs of protection. This may occur when insurance funds—state or private—accept risks at less than their true costs, through erroneous rating or in response to political or social pressures.

5. *Linking Benefits and Burdens*

In addition to all the ideas that exist about why some people should receive reparation, and why others should pay damages, there is a popular idea that the two should be linked together. What one pays, the other should get, and vice versa. This corresponds to the common sense rule that a child who breaks another's toy should give the other one of his own to replace it. It

corresponds also to the judicial formulas of tort law, which order one person to pay another a certain amount. Workmen's compensation law also goes through the motions of linking benefits to burdens, since employers are made "liable" to pay the benefits to which their employees are entitled.

A complete departure from the linkage idea is presented by all of the voluntary direct loss insurance systems (life, accident, collision, hospital and medical). Under these regimes, people pay premiums without knowing who will benefit from them, while others draw benefits from the fund without regard to who has paid them (except that they themselves must have paid enough to qualify as participants).

But the difference between the liability and the loss systems is not so great as the theory would suggest. Since most of what is paid under tort law and workmen's compensation is paid by liability insurers who have collected from a large group of policy holders, the linkage is more apparent than real. Nevertheless, the claimants must go through the form of proving that some particular defendant *ought* to pay, and this leads to characteristics of the system which many people would regard as desirable. One of these is that the system tends to be self-propelling. The desire of victims to be paid leads them to force defendants to bear their share of the burdens. At the same time, the defendants or their insurers have a chance to resist payment of exaggerated amounts, and they police the reasonableness of claimants' demands with commendable tenacity.

In social security, on the other hand, the imposition of burdens requires the interposition of a government tax-collector; in voluntary direct loss insurance, an effort of salesmanship is required to induce the public to accept the burdens of paying premiums. In both, it is arguable that the disbursing agents lack the same incentive to resist excessive payments which are met in the liability insurance systems. The civil servants who administer social security might lack motivation to fight claims. While private

insurance companies would have a pecuniary interest in doing so, this would be mingled with their desire to please their customers, who are the same as their beneficiaries.

Another possible merit of the direct linkage of benefits and burdens is the possibility of punishment, deterrence, and social cost accounting, all of which work (if at all) through the direct linkage. In contrast, the social security and voluntary direct loss insurance systems have little or no punishing, deterring, or cost accounting effects. But this does not have to be so. One can imagine a system in which contributions to the fund were levied in relation to the experience rating of an automobile owner, but benefit payments would be made directly from the fund to injury victims. The federal-state unemployment insurance systems work on such a plan, and so does workmen's compensation under a compulsory state fund, as in Ohio or Ontario.

Granting that the direct linkage of benefits and burdens in "liability" systems of reparation yields certain advantages, one must recognize that it is accompanied by certain inconveniences and inconsistencies. One of these is the adversary aspect which permeates each step of the proceeding. The defendant, or his liability insurer, attempts to settle each claim for as little as possible, while the claimant demands as much as possible, since each finds that he will certainly achieve less than he seeks. The more loosely linked system of social security seems to result in more harmonious settlement of cases.

A related inconvenience is that the reparation received on the one hand and the burden borne on the other may be far off the mark because of the inability or indisposition of one of the parties to defend or prosecute his case effectively. The "self-propulsion" of the system tends to vary with the litigious potency of the injury victim.

A third difficulty, or set of difficulties, flows from the fact that under such a directly linked system, the amount which any particular victim can receive is limited by the amount which a par-

ticular defendant can be asked to contribute. In legal theory, these are exactly the same. That is, courts and commissions determine how much a victim should receive; and if they find a defendant who fulfills the conditions of a contributor, they order him to pay that amount.

This creates great difficulties, for a variety of reasons. On the one hand, there are a large number of victims who cannot prove that some other person is chargeable with the loss. There are also a large number of cases in which the social loss occasioned by the injury (especially in fatal cases) is much greater than the amount which can be claimed by any identifiable victim.

A further set of difficulties is introduced by operating expenses of the system. The amount which the court or commission sets as right for the victim to receive and for the defendant to pay is almost invariably much greater than what the victim actually receives, and much less than the defendant actually pays; the difference is the injured person's collection expense. The Michigan survey, fully corroborated by many others, showed that automobile injury claimants receive aggregate amounts which are less, by more than a fourth, than the amounts which are agreed on as settlements. It is also demonstrable that automobile owners pay (through insurance premiums) aggregate amounts which are very much greater than the aggregate amount of settlements. Instead of burdens equaling benefits, as the rules of law provide, the former are approximately double the latter.³⁷

C. ECONOMY OF OPERATION OF REPARATION SYSTEMS

One of the characteristics of reparation systems which is of greatest popular interest is the cost of operation. One part of this is the "cost of justice," a notorious subject of controversy from time immemorial to the present day. The costs involved in some of the principal systems have been shown in the preceding chapter.

³⁷ Chapter 1, Table 1-4.

These figures are presented with certain caveats. The first caveat is that these figures do not, and cannot, include all the costs. In public programs, there are concealed costs involving the earning value of the capital invested in the program, which would appear in a private program as dividend or interest costs. In all kinds of programs, there are concealed costs involving money which is paid to the wrong people. A recent news report stated that an investigation of welfare payments in three West Virginia counties showed that 11 percent of the recipients were ineligible.³⁸ Other investigations have revealed fakery in collection of damage claims under tort law.³⁹ No reparation system can be assumed to be immune from costs of this kind, none of which can be accurately measured.

The second caveat is that the figures cannot present all of the benefits, some of which are not even susceptible of quantification. This is particularly true of the liability systems—tort and workmen's compensation—which have the functions not only of providing reparation to injury victims, but also of deterring dangerous activities and (in the case of tort law) deterring negligent conduct. The social benefits of tort law are not only the cash which injury victims receive—as shown in Figure 1-2 (*supra*)—but also *potential losses which are prevented from occurring* because tort law has increased the price of owning an insured automobile and has warned drivers who can afford one to drive carefully and follow safety practices.

A third caveat is that each of the various "systems" involves a myriad of variations. In voluntary loss insurance, for example, an overall expense rate of about 28 percent is indicated. This is made up of programs of group medical insurance in which the operating expense rate is under 5 percent, and programs of in-

³⁸ Jonathan Spivak, "Welfare Chiseling," *Wall St. Journ.* Vol. XLIII, No. 40 (Dec. 10, 1962), p. 1.

³⁹ Morton M. Hunt, "Damage Suits: A Primrose Path of Immorality," *Harper's Magazine*, Vol. 214 (Jan. 1957), p. 67. "Malingering in Personal Injury Cases," *Temple Law Quart.* Vol. 35 (1962), p. 141.

dividual insurance of various types where the operating expense rate is over 50 percent. Likewise the tort system embraces individual cases in which reparation was received without any expense at all, as well as cases in which the expense of obtaining the reparation consumed all of the reparation received.

Despite these limitations on data, there are important lessons to be learned from a consideration of system operating expenses. One lesson is that every reparation system has costs, so that the dollars which are disbursed are less than the dollars paid in. Whenever the law decrees reparation by A to B, the aggregate amount received by people like B will be materially less than the amounts paid out by people like A, because each of them will have legal or insurance costs; the only escape is through making people like C (who have nothing to do with the case) contribute the administrative expense as taxpayers or as philanthropists.

The second lesson is that rather substantial numbers of individuals and enterprises are dependent upon the administration of present reparation systems. To put the matter bluntly, if one could abolish overnight the reparation of personal injuries through tort law, one would not only deprive injury victims of about one and a half billions of compensation, but one would also deprive workers and investors in the insurance business and the legal professions of more than one and a half billions of income.⁴⁰

The third lesson is that there are very great differences in the expense rates of the different systems, if viewed merely as ways of distributing money. In the tort system, operating costs appear to exceed the net amount of cash benefits distributed.⁴¹ In the social security system, the operating costs appear to be less than 5 percent of the distributed benefits. Although the aggregate figures presented do not show it, a survey of Blue Cross in Michigan indicated that it also distributed benefits at a cost of less than 5 percent.⁴²

⁴⁰ Chapter 1, Tables 1-2 and 1-3.

⁴¹ Chapter 1, Table 1-4.

⁴² Walter J. MacNerney and staff, *Hospital and Medical Economics* (Chicago: Hospital Research and Educational Trust, 1962), Vol. 2, p. 1051.

There are obvious reasons for these differences, in addition to the fact that the tort system attempts to perform many functions besides distributing money. The social security system distributes with virtual disregard of individual needs or circumstances, thus awarding some people nearly as much when disabled as they could earn if able; it is said that the program of aid to dependent children pays some mothers more than they could possibly earn as full-time workers. To others, the social security system awards only a fraction of their lost earnings. The tort system, on the other hand, undertakes a completely individualized reparation.

D. SATISFYING "THE POPULAR SENSE OF JUSTICE"

Many readers of the foregoing pages will be annoyed by the concentration on objectives of "social engineering," and the ignoring of more mystical values known as "fireside equity," or more bluntly as "gut justice." These considerations have been left until last because there is no way of determining just what their demands are; they may arise from a mingling of somewhat conflicting aims, which have already been identified as restoration, subsistence, loss equalization, punishment, deterrence, social cost accounting, and redistribution.

Any attempt to analyze popular preferences on these matters may well start with Edmond Cahn's observation that the perception of justice is much more difficult to register than the perception of *injustice*.⁴³ The survey has disclosed a number of specific matters which participants in the reparation process are particularly likely to identify as "injustice."

Among these, probably the delay and uncertainty of a tort settlement stand first. Of almost equal prominence is dissatisfaction of claimants with their lawyers, which probably stems from the same causes. A large number of injury victims felt that lawyers charged too high fees, but this did not seem to be so

⁴³ Edmond N. Cahn, *The Sense of Injustice, an Anthropocentric View of Law* (New York: New York University Press, 1949).

much an objection to the rate of pay as to the small amount of aid and comfort which the claimant received in exchange for it.⁴⁴

From other evidence, one could conclude that there is a widespread popular revulsion against failure to care for the economic loss of injured persons regardless of negligence and contributory negligence. This is not particularly identified with the idea that the causers of loss should pay; on the contrary, the feeling seems to be that it should be taken care of by "insurance," without regard to what kind.⁴⁵

The feeling that negligent drivers should suffer or be kept off the road was rather faintly echoed in the comments of persons interviewed.

If one wishes to relate these comments to existing reparation systems, one will note that the social security and voluntary hospital insurance systems for supplying wage loss and medical care (respectively) seem to meet the popular demand as well as the workmen's compensation and tort methods, which allocate the burden more meticulously. The tort way seems to evoke a number of popular repulsions because of its delays, uncertainties, and expense.

SUMMARY ON FUNCTIONS

No valid evaluation of reparation systems can be made which measures them by a single dimension. Some are better than others for procuring medical treatment, some for maintaining subsistence, some for compensating total loss, some for deterring negligence, some for raising the price of hazardous activities, some for spreading broadly the pain of loss, some for economy of operation. If any of the major elements in the scheme is knocked out, some important function will remain unperformed.

⁴⁴ See Chapter 8.

⁴⁵ Roger B. Hunting and Gloria S. Neuwirth, *Who Sues in New York City?* (New York: Columbia Univ. Press, 1962), p. 131.

In the Michigan survey, the most frequent "reform" suggestion of injury victims was compulsory liability insurance. See Chapter 8.

This does not mean that nothing in the picture can be changed. In fact, a great many elements in the picture are quite recent. Workmen's compensation entered about fifty years ago; social security was added about twenty-five years ago for survivors' benefits and within the last ten years for disability benefits; hospital and medical insurance is largely a growth of the last fifteen years. It seems probable that further changes will be made in reparation systems, which might include the shifting of functions from one system to another, and altering the linkage between benefits and burdens. When such changes are made, they should be made with a clear perception of the plurality of functions to be performed, and of the plurality of systems now performing them.

CHAPTER 3

Estimating the Social Value of a Reparation System, with Particular Attention to Auto Injury Reparation

Social welfare is affected initially by casualties such as auto accidents, and subsequently by the existence and operations of a reparation system. Estimates are made in this study of some of the more measurable costs of auto accidents themselves, and of the administrative and operating costs of the reparation system. What are the benefits of the reparation system? The system cannot eliminate auto accidents, nor even reduce them very much. What it can do is to reduce the social cost of those that occur. The purpose of this chapter is to examine to what extent one can analyze and even measure these "cost-reduction" benefits.

A. DETERMINANTS OF SOCIAL WELFARE

It must be candidly admitted at the start that the precise measurement of social welfare has been adjudged by economists to be impossible.¹

Where social decisions have to be made, they are made; and some attention has been given to devising voting schemes which are likely to select the alternative producing the higher social welfare—bypassing the measurement problem.² It is easier to say *how* certain things will affect social welfare than to measure the quantitative effects they will have, and still easier to say *what* things will affect welfare without specifying even the direction of

¹ Kenneth Arrow, *Social Choice and Individual Values* (New York: John Wiley and Sons, Inc., 1951); Jerome Rothenberg, *The Measurement of Social Welfare* (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961); J. De V. Graaff, *Theoretical Welfare Economics* (Cambridge: Cambridge University Press, 1957).

² See Gordon Tullock and James Buchanan, *The Calculus of Consent* (Ann Arbor: University of Michigan Press, 1962); see also William Vickrey, "Utility, Strategy, and Social Decision Rules," *Quarterly Journal of Economics* LXXIV (Nov. 1960) 507-35.

the effects. It is generally felt that if an economy can at the same time produce more goods and services and leave more leisure, social welfare is greater, other things being equal. It is also generally agreed that the way in which the good things of life are distributed among members of society will affect individual and social welfare. These two criteria—total output and its distribution—are frequently expanded (or subdivided) into five, and the five describe commonly expressed goals of the economic system:

Full employment

Optimal rate of economic growth

Price stability (or near stability)

Equitable distribution of income and wealth

Efficient allocation and utilization of resources

(maximum production with resources available)

The first three of these are probably little affected either by auto accidents or by reparation systems, and can be dismissed with a few brief comments:

Involuntary unemployment is generally felt to involve a reduction in social welfare. Unemployed workers do not store up energy which can lead to more output later on. Indeed their skills become obsolete, their work-habits rusty, and their morale low. Empirically we know that the impact of unemployment is largely on the uneducated, the unskilled, the minority groups, the very young, and the very old. Ever since the depression of the 1930's, a high level of employment has been seen as perhaps the main goal of social policy.

Economic growth has been a more recent concern, particularly with the stress on competition with Russia; even attempts to reduce unemployment have been justified more and more in terms of their contribution to the rate of growth. One method of securing growth is to devote more of the output to investment in capital equipment and research and development, so that output per man hour will be higher in the future. Investment in the education and training of individuals, who are "human capital

equipment" of vast importance even if they cannot be owned by someone else, is another important mechanism for increasing the growth rate. It is frequently assumed in general discussions that growth is likely to benefit most of the population, or that, if some benefit more than others, various transfer mechanisms can redistribute the benefits.

Stability of the price level, and therefore of the value of money, is sought as an objective partly because of the effects of unstable prices on output, but mostly because of arbitrary and frequently inequitable effects on the distribution of that output. Widows and orphans suffer, speculators benefit.

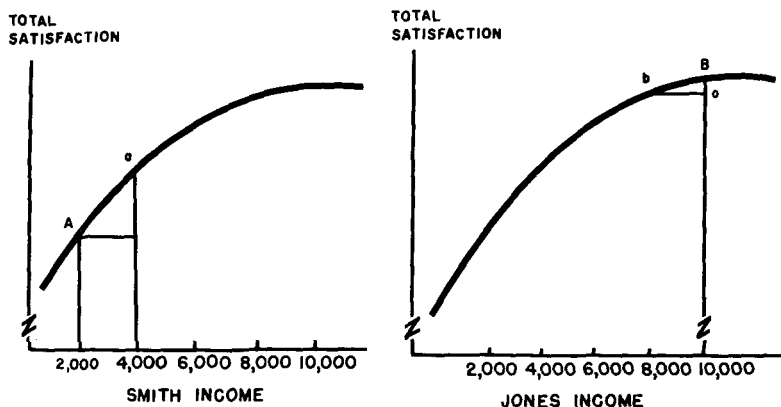
It is the fourth and fifth determinants of social welfare which are most affected by auto accidents, and by reparation systems. The distribution of income and wealth is dramatically affected; if the original distribution was fair, the presumption is that erratic changes lead to inequity. The allocation of resources to the most efficient production of the correct goods and services can be affected by the method of paying the costs of accidents and later redistribution of those costs through a reparation system.

B. EQUITY IN THE DISTRIBUTION OF INCOME

If the original distribution of income was not optimal, it is difficult to say anything conclusive about things which change that distribution. Economists and moral philosophers have long discussed the "optimal" distribution problem without agreeing. Egalitarians have argued that *faute de mieux* we might as well assume equal capacity to enjoy income, and assume that increments of income produce smaller and smaller increments in total satisfaction to an individual (this is the theory of the diminishing marginal utility of money). If this be accepted it is easy to prove that taking money from those with high incomes and giving it to those with low incomes, decreases the satisfaction of the former less than it increases the satisfaction of the latter, thus increasing

social welfare.³ Even though satisfaction is neither measurable nor comparable as between individuals, it may be useful to show how these economists think total satisfaction would be affected by redistribution, using diagrams as though measures were possible. In Figure 3-1, the curves depict total utility (satisfaction, ophelimity, welfare) of two individuals at varying income levels. There is an arbitrary constant of infinite size (the value of survival) represented by the break in the vertical scale. Taking \$2000 from Jones' high income and giving it to Smith appears to reduce Jones' satisfaction less than it increases Smith's.

FIGURE 3-1



The shift in the respective positions of A and B to those of a and b would then increase social welfare if Jones and Smith were equally "important," not affected by envy or pity, not strikingly different in their capacity to enjoy life, and if they derived diminishing increments of satisfaction from each added bit of income.

Many other economists doubt that one can make such assumptions of independence, comparability, or even diminishing mar-

³ See for example A. P. Lerner, *The Economics of Control* (New York: Macmillan, 1944), chapter 3.

ginal utility of income.⁴ If people's aspirations and capacity for enjoyment are expandable, then except in the very short run, continual increases in income may provide undiminished increments in satisfaction.

People may well be affected by the situation of others. In practice it is families, not individuals, who are counted, and families of different ages and sizes have different needs for money. Wealth, also, is a substitute for money. Owning a home provides "free" housing. Hence, the distribution of money income does not measure the distribution of total satisfaction.⁵ Yet social policy in most Western countries has clearly accepted the general notion that extreme inequality in the distribution of income and wealth reduces social welfare. Some rough approximate assumptions about the determinants of satisfaction must have been made to come to this conclusion.⁶

For smaller redistributions of less clear sorts, it is more difficult to make even approximate conclusions. The treacherous nature of this problem has led to a number of attempted theoretical solutions. One useful construct is the "social welfare function," which provides (without specifying how or by whom) a weighting of each individual so that one can combine their preferences.⁷

⁴ See any recent book on "Welfare Economics," such as J. De V. Graaff, *Theoretical Welfare Economics* (Cambridge: Cambridge University Press, 1957), or I.M.D. Little, *Critique of Welfare Economics* (2d edition; Oxford: Oxford University Press, 1957).

⁵ For some attempts to show the differences between estimates of inequality based on different definitions of income and of the unit, see Martin David and James Morgan, "New Interpretation of Statistics on Income Distribution," *Proceedings of the Business and Economic Statistics Section, American Statistical Association*, 1961, 338-46.

⁶ The overall effect of government and private transfers in redistributing income is assessed in Morgan, David, Cohen and Brazer, *Income and Welfare in the United States* (New York: McGraw-Hill, 1962), chapters 13, 18, 19.

For a study of the effects of government taxes, transfers and expenditures, see Alfred H. Conrad, "Redistribution Through Government Budgets in the U. S., 1950" in *Income Redistribution and Social Policy*, Alan T. Peacock, ed. (London: Jonathan Cape, Ltd., 1954), pp. 178-267.

⁷ See Abram Bergson (Burk), "A Reformulation of Certain Aspects of Welfare Economics," *Quarterly Journal of Economics* LII (1938) 310-34. See also Tullock and Buchanan, *The Calculus of Consent*, *supra* note 2.

In the case where one is deciding whether a particular change is an improvement in social welfare, the Bergson solution was not much of an improvement over the original Pareto condition, i.e., if some are made better off and no one is made worse off, then group welfare rises.⁸ The Pareto condition could not be applied where anyone was made worse off, and the Bergson function required making a detailed set of ethical judgments before anything could be said about group *welfare*.

Hicks and Kaldor provocatively proposed the "bribery" test of social utility. If those who gained from a change could afford to "bribe" the losers to accept it, while the potential losers could not afford to bribe the others into accepting the status quo, then they said the change was an increase in welfare—some even added: whether or not compensation *was* actually paid.⁹

But it was soon pointed out that there might be changes where it would pay the gainers to bribe the losers, but once in the new situation, it would pay the losers to bribe the gainers into accepting a return to the original situation. To deal with this, Tibor Scitovsky proposed a double criterion, that it should pay the gainers to bribe the losers, and *in the new situation* should not pay the losers to bribe their way back.¹⁰

These speculations are intriguing, but not very important. The situations which lend themselves to analysis by the "bribery" test are surely rare. Even where they exist, they do not actually escape the necessity for making ethical judgments. At rock bottom there must be a judgment whether compensation should actually be *paid*.¹¹

⁸ Vilfredo Pareto, *Manuel d'Economie Politique* (2d ed.; Paris, 1929), pp. 617ff.

⁹ J. R. Hicks, "The Foundations of Welfare Economics," *Economic Journal* LXIX (December, 1939) 696-712, N. Kaldor; "Welfare Propositions in Economics and Interpersonal Comparisons of Utility," *Economic Journal* LXIX (September, 1939) 549-52.

¹⁰ Tibor Scitovsky, "A Note on Welfare Propositions in Economics," *Rev. Economic Study*, IX (1941-42) 77-78.

¹¹ For a summary, see J. De V. Graaff, *Theoretical Welfare Economics* (Cambridge: Cambridge University Press, 1957), esp. Chapter V.

There are interesting historical examples both of compensation and of noncompensation for social reforms. The British Parliament appropriated 20 million pounds sterling in 1833 as compensation for the freeing of slaves,¹² allocated it to the islands of the West Indies in proportion to their exports, and allowed the planters on the islands to divide it up according to their own judgment.

In the United States, although Abraham Lincoln advocated compensation in the hope of avoiding a civil war, it was never paid, and indeed the Fourteenth Amendment actually forbids payments, even by the states.¹³

A British law allowed property owners to collect compensation when the action of a public authority affected the value of their property, and allowed the authority to collect "betterment" if the value was increased. In practice this was unsatisfactory. Betterment could not be collected, and the compensation demands made change too costly.¹⁴

Conversely, the cries of those who might have been affected adversely and not compensated have hampered tariff reductions in the United States for years. Recently for the first time, suggestions have been made in a government document that subsidy or compensation payments, retraining of workers, paying of moving expenses, etc., be provided for where tariff reductions would otherwise injure industries or individuals.¹⁵ Whether this helped the

¹² See W. L. Burn, *Emancipation and Apprenticeship in the British West Indies* (London: Jonathan Cape, 1937); and William L. Mathieson, *British Slavery and Its Abolition* (London: Longmans, 1926).

¹³ See Edward C. Kirkland, *The Peacemakers of 1864* (New York: Macmillan, 1927). See also a book by Lincoln's emissary: J. R. Gilmore, *Personal Recollections of Abraham Lincoln and the Civil War* (Boston: L. C. Page, 1898). For a summary of many historical attempts to compensate see James N. Morgan, "The Elimination of Gains and Losses Resulting from the Operations of Governments: A Theoretical and Empirical Study in Welfare Economics" (Cambridge, Mass.: Unpublished PhD Thesis, Harvard University, 1947).

¹⁴ See Great Britain, Ministry of Work and Planning, *Final Report of the Expert Committee on Compensation and Betterment* (Uthwatt Report), Cmd, 6386, London, H.M.S.O., 1942.

¹⁵ U. S. Congress, Joint Economic Committee, *Trade Adjustment in Theory and Practice*, Committee Print, 87th Congress, 1st Session, 1961.

passage of the administration's 1962 trade bill is difficult to say.

What conclusions should be drawn from these considerations? Although many economists avoid facing the problem of actually paying compensation, it seems clear that extreme and erratic redistributions of income or wealth by casualties involve reductions in total welfare. Indeed, even one of the more critical writers concludes:

It is of course true that the majority of policies which welfare theory has to appraise will involve redistributive changes of some magnitude, and that interpersonal comparisons are required. But I suspect that a surprising degree of agreement on whether a given redistribution is good or bad will often be found in contemporary Western Society. Equalitarian details, with money income (or, perhaps, wealth valued in monetary terms) as the yardstick of equality, are nowadays extraordinarily widely dispersed.¹⁶

Why is there presumptive evidence that any major random redistribution by casualty will reduce social welfare? Because it is assumed that public policy has already achieved a politically acceptable distribution of income. This is accomplished through progressive income and inheritance taxes, free or subsidized government services such as education, and an elaborate set of income maintenance programs. Some programs work by forcing people to provide for their own retirement, others by taking care of people in difficult circumstances without any prior contribution from them (Welfare, Old Age Assistance, Aid to Dependent Children, Aid to the Permanently and Totally Disabled, Workmen's Compensation). Of course, there may always be some particular redistributions which most people would regard as increasing social welfare; but such a beneficial redistribution is unlikely to occur by chance, if the existing distribution is at all acceptable. The more acceptable it is, the less likely it is that a change will be an improvement.

¹⁶ Graaff, *Theoretical Welfare Economics* (1957), p. 169.

C. EFFICIENCY IN UTILIZATION OF RESOURCES

Social welfare is clearly increased if, without changing anything else, it is possible to produce more, or to produce a product-mix closer to what is optimal. How does one define what is optimal?

The market prices provide guides as to what is optimal, provided the distribution of income is optimal and some other conditions hold. In the process of shifting production, the distribution of income is always affected, so that it is difficult to specify what changes are improvements. What *can* be done is to specify the simultaneous optimal conditions where both the distribution of income and the allocation of resources are best.

This involves interpreting, with the aid of more specific sub-rules, the general rule that each commodity or service should be produced up to the point where the social benefit from producing one more starts to become less than the social cost of producing one more. Under what conditions will people in a competitive society, seeking their own profit and satisfaction, bring about this desired result? The answer is: When a series of five subordinate equalities also hold, as follows:

1. For each product or service the social benefit from producing one more must equal the price at which it can be sold.
2. The price at which it can be sold must represent the additional revenue to the producer for making and selling one more.
3. The additional revenue must equal the additional cost in producing one more.
4. The additional cost must equal the added factors of production used times their price.
5. The prices of the added factors must equal their social cost.

It is next necessary to inquire under what conditions these equalities may be expected to prevail in a free society.

- (1) When do prices in the market reflect the social value of

the commodities? Certainly only if the distribution of purchasing power is somehow socially acceptable—not necessarily equal, but certainly passably fair. Clearly the prices of canned milk and of Cadillacs may not reflect their social utility in countries with extreme wealth and poverty. It is also necessary that consumers should be informed, know what they want, and see one another only to a limited extent, etc.

It is generally assumed, then, that these sensible consumers achieve a balance in their consumption. Consuming more and more of one thing involves giving up more and more of another. The added satisfaction from increasing consumption of one must gradually become less than the satisfaction foregone by giving up the second, otherwise why would both be consumed?

It must also be assumed that desirable goods and services can be sold in the market and their value paid for. Sometimes this is just not feasible, as where the apple grower provides apple blossom nectar for bee-keepers in the area. Sometimes it would be wrong even if feasible to charge a price, as in the case of "public goods" where more people can enjoy them without others being deprived, e.g., knowledge, or an aerial fireworks display.¹⁷ Even if these assumptions are not fulfilled perfectly, one might argue that they hold in the main. But of course, the major requirement is that the distribution of purchasing power be acceptable.

(2) When does the price of the added product equal the added revenue to the producer? This is true when the producer is selling in a competitive market so that his own increased sales will not depress the price. If any sort of indivisibilities make this assumption untrue, the producer has a degree of monopoly. In the monopoly situation he does not ask what the price *is*, but what added revenue would come from producing and selling more. The expected revenue from the increased output must take account of

¹⁷ For a careful analytical treatment of these two reasons for market failure plus a third resulting from indivisibilities, see Francis M. Bator, "The Anatomy of Market Failure," *Quarterly Journal of Economics* LXXII (August 1958) 351-79.

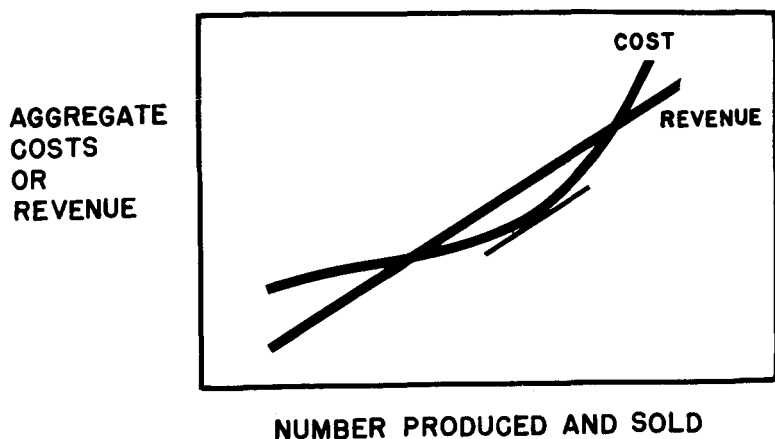
expected losses from lower prices on the total output. Thus the added revenue from producing one more is less than price if monopoly exists. Hence the equation requires competition in the production and selling of goods and services.

(3) When will the added revenue from one more equal the added cost to the producer? When he maximizes his profits. This is indeed the classical economic rule for profit maximization.

The slopes of the lines in Figure 3-2 are the marginal increments in cost and revenue respectively, and clearly where the vertical difference between total cost and total revenue is a maximum (maximum profits), the slopes are equal. There must be increasing incremental costs, of course, whether from increased costs internally or in purchasing labor and materials from more valuable alternative uses.

(4) Under what conditions will the added cost of producing one more be equal to the added factors used times their price? When there is competition in the markets and where factors of production are purchased so that no individual producer worries

FIGURE 3-2



about bidding up the price of labor or materials by his own activity. In a one-company town, this calculation of the possible added costs of having to increase wages of everyone in order to secure a few more workers may exist, but it is not considered common.

(5) Finally, under what conditions will the prices of the added factors of production represent their social costs? These factors are being bid away from alternative uses, hence their prices will represent the social benefits foregone in those other uses, provided all the other equalities hold universally.

There is an exception to this last statement: sometimes the production of some good or service involves a social cost which is not reflected in any necessary payment by the producer. An industry may pollute a stream or the air, a farmer may contribute through poor practices to flash floods in the valley below. These external diseconomies of production mark a major problem where legislation is called upon to improve the operation of the competitive system.

There may also be situations where the marginal conditions are insufficient, so that a major change could lead to a new higher optimum, but can only be made by a series of steps the first few of which make things worse. The change from private cars to public transportation in a city may be an example.

Not only are these optimal conditions based on a set of rather strong assumptions, they are also untestable, and unquantifiable. They represent a theoretical optimum, but real world policy is made moving from one less-than-optimal condition to another, hopefully better, condition. Nonetheless, it is generally assumed that major further departures from these optimal conditions are to be minimized.¹⁸

¹⁸ For an early clear statement of the conditions see Abba P. Lerner, *The Economics of Control* (New York: Macmillan, 1944). For a recent more precise statement, see Francis M. Bator, "The Simple Analytics of Welfare Maximization," *American Economic Review* XLVII (March 1957) 22-59.

D. APPLICATION TO INJURY REPARATION

What is the connection between the rules for maximum social welfare and the problem of personal injuries and reparation? In order to focus discussion, consideration will be given *particularly* to injuries caused by the operation of automobiles.¹⁹ There is a reduction in social welfare resulting from personal injury automobile accidents, both from the reduction in present wealth and productive potential, and from the arbitrary redistribution of wealth (concentration of costs on a few people). The first is much easier to quantify than the second, since it involves only estimating the costs of repair or replacement of damaged objects (whichever is cheaper), medical costs, and the discounted value of the lost future income in the case of death or disability. Quantification of the reduction in social welfare through lack of any "loss spreading" that would make the effects distributionally neutral, would require measurement and interpersonal comparisons of the utility of income—clearly impossible.

There is also a long-run loss in social welfare if accident costs are not properly reflected in the costs of using an automobile, and this, too, is difficult to estimate. It involves the costs of extra accidents because of inadequate deterrents, and the costs of using resources in the automobile transportation industry, or in the private automobile section of it, where their value (net of accident costs) is lower than in some other use (such as railroads, or public transportation).

Turning to the other side of the coin, a reparation system can per se affect the level of social welfare in three ways: It can redistribute the losses, in a way almost certain to improve the distribution of wealth and income (by reducing the redistribution which was occasioned by the injury). Second, it can improve resource allocation by seeing to it that the inevitable accident costs

¹⁹ This subject has been usefully explored for the whole tort field by Guido Calabresi, "Some Thoughts on Risk Distribution and the Law of Torts," *Yale Law Journal*, LXX (March 1961) 499-553.

of the automobile transportation "industry" are borne by the industry (and those deciding on its scope) rather than by society generally. Third, it may actually reduce the original costs of accidents by deterring negligence and thus reducing avoidable accidents. (The distinction between avoidable and unavoidable accidents is arbitrary and perhaps empirically impossible, but is a necessary conceptualization.) It is easier to make the case for an improvement in social welfare by these three means than to provide even the crudest procedures for quantifying the extent of the benefit. A reparation system has its own costs of administration, which must be deducted from the benefits, too.

Taking the first contribution of a reparation system, its redistribution of wealth, why does it increase social welfare? In the case of the uninsured motorist, it may not, particularly if the driver at fault is also injured. Shifting the loss to the negligent party may have other benefits (deterrence of negligence, "justice"), but may well increase the departure of the distribution of wealth from the optimal. The reparation system, however, may well force people to insure, and it is the insurance which provides the loss spreading. Even with liability not everyone carries insurance, but without it, fewer would. Why, then, is the spreading of losses, the offsetting of any arbitrary shocks to the distribution of wealth, considered to increase social welfare? It is because of an implicit assumption that in general the distribution of wealth (and income) reflects a social and political decision with various devices (progressive taxes, transfer systems) to achieve it.²⁰

Hence, the spreading of losses induced by a reparation system may well increase welfare (by reducing the amount a concentrated loss would have impaired it), whereas the tort liability in the uninsured case is just as likely to have unfortunate as fortunate repercussions on income distribution. Its effects must find their justification on other grounds.

²⁰ Graaff, *Theoretical Welfare Economics*, p. 169; see also Calabresi, *supra* note 19, at 527.

What of the second argument, that a reparation system may improve resource allocation? Application of cost theory to automobile accidents makes it clear that accident costs are part of the social costs caused by the automobile transportation industry in the same way in which work accidents are part of the costs of industrial production. If the automobile transportation industry is not required to bear the costs, there is a subtle social subsidy which encourages more automobile operation than would take place if people knew they would have to pay what it costs. Why don't people take account of these costs, or why wouldn't they without a reparation system? Mainly because the impact of accidents is irregular and serious accidents are not frequent. Most people injured in auto accidents have not previously been in a serious accident. In addition, most people think of themselves as better than average drivers, not so likely to have an accident. And even those who are negligent may get away with it for a long time if other drivers are alert. Hence, human nature being what it is, people may well tend to underestimate the probability of being affected by an accident. A reparation system and the connected insurance available provide clues as to costs of driving an automobile. Where insurance rates are keyed to mileage or location, there are added clues as to the differential costs of driving more or driving under more crowded conditions. For convenience, it is helpful to think of the automobile transportation industry as consisting of many small (family) firms each owning a transportation-producing asset (a car) and selling its services to the same family.

It is important here to make an arbitrary distinction between two sorts of accidents: First, there are injuries which are the probabilistic result of having cars on the road with the inevitable chance events or unintended errors of judgment. Second, there are injuries which result from gross negligence or violation of traffic laws, and which may be much more frequently caused by some people than by others. In order for optimal decisions to be made, the actuarial cost of the "inevitable" accidents should be

spread over all the drivers, perhaps according to how much they drive and under what conditions. They would then be free to decide how much to drive, but would know, and pay, the full costs.

The costs of the avoidable accidents should presumably be assessed against the particular drivers who cause them, as though they were making decisions to be negligent and knew that they would have to pay the costs of that negligence. This is difficult for several reasons. First, much negligence is never discovered because it does not result in an accident. Second, the costs are frequently beyond the financial capacity of the negligent driver. There is a need for penalties to deter negligence, perhaps as high for those who are lucky as for those who happen to cause an accident, but what about the remaining costs? Perhaps they should be spread among all drivers on the ground that there will always be fools or misfits driving. Perhaps they should be covered out of general tax funds.

The existing system fulfills these rules badly if at all. The unavoidable accidents, resulting from no one's negligence, are theoretically not compensable and for the most part therefore not covered by automobile liability insurance. They may be covered by other forms of insurance, private or social, but a proper pricing system would *require* that auto owners carry collision insurance, and income loss insurance for death or disability resulting from auto accidents. Only such a system would add to the cost of driving an automobile the inevitable costs of the "inevitable" accidents. (But there would be difficulties because of the operating costs of such a system, as will be explained below.)

On the other hand, the "avoidable accidents" bring into play a mixture of tort liability and liability insurance which spreads the costs of these accidents among all insured drivers, or leaves them on the victims of uninsured motorists. The spreading eliminates most of the possible deterrent to the guilty driver; it therefore defeats the resource allocation function, unless one assumes that the deterrent is ineffective anyway.

The third advantage of a reparation system—that of deterring accidents—raises a different kind of difficulty; that of assessing the effectiveness of deterrents. The social gain from avoiding an accident can be approximated by estimating the cost of the accident. The question is whether tort liability, particularly with insurance available, is deterrent, and to what extent it reduces accidents beyond what other considerations might. After all, the negligent driver risks his own life, limb, and car too.

There are two other problems to keep in mind before returning to the problem of measurement. Whenever there is damage to productive capital equipment, physical or human, society has an interest in its optimum rehabilitation as an economic matter, entirely apart from ethical considerations of justice or "making good." In the case of human beings, in particular, the social conscience demands as much rehabilitation as possible even where it does not "pay" economically, as in the case of a retired person. In the case of equipment it is frequently an easy matter to determine whether it is more economical to scrap or repair. The clearest case, however, is where the resources devoted to rehabilitation of the person are obviously less than optimal, because he does not have the funds (no one was liable, or perhaps he was the negligent party). Here society may properly insist on rehabilitation, and a difficult question arises as to who should pay for it.

Finally, once it is obvious that there are social costs of injuries which would be reduced by a reparation system and by some deterrents, it is still necessary to ask whether the increase in welfare from the reparation system is greater than the costs of having the system. It is this question which makes some crude quantification of the magnitudes important. It may prove desirable to trade some loss in precision in social cost accounting for economy and simplicity in the reparation system. If someone suggests also trading some loss of equity in the resulting income-wealth distribution for economy in the system, it becomes necessary to say something even about the quantitative advantages of equity.

E. AN ILLUMINATING EXCURSION

One way to get a fresh view of a social control system is to look at another area where no system exists, and ask whether it would be useful to have one. Air pollution furnishes a good illustration. Here there are social costs, created by the activities of some, and felt by others. The costs are not evenly spread, but concentrated on those who live on the valley floor, or who have weak lungs.

Should some system be instituted for assessing the cost of air pollution on those who cause it, or is it enough to pass laws prohibiting certain blatant forms of pollution? Pittsburgh passed a law regulating the grades of coal which could be used in home furnaces, rather than attempting to tax high-sulphur coal because of its role in pollution (perhaps because with a stoker poor coal burns with little smoke).

Suppose that the costs of determining and allocating costs, and adjudicating claims, and enforcing the system, were substantial in relation to the total social cost involved. One might then conclude that it was cheaper and better to allow the air pollution than to incur the costs necessary to eliminate it. It might also be so much cheaper to pass regulations than to assess costs, that a clear social gain would result in spite of imperfections in a regulatory system. The major imperfection in any regulatory system as against a social costing system is that it fails to allow flexibility. A producer of pollution, faced with a charge for this pollution rather than a regulatory prohibition, can decide whether to pay the charge (which would be used to compensate the victims, and help pay for their cleaning bills), or to spend the money eliminating the pollution. It may well turn out upon investigation that it is much cheaper to eliminate the pollution than anyone thought. Those for whom it is very expensive could still pollute and pay.

A major difficulty in allocating costs is that the social costs of many activities cumulate with the extent of the activity. The capacity of a particular atmosphere to absorb wastes is limited (as

is the capacity of highways to carry traffic without accidents). Hence it is impossible to isolate the contribution of any one individual and evaluate it. It is conceivable that with 100 factories, one almost never gets smog but that with 150 it becomes an acute problem. This cumulative disequilibrium problem is even more dramatic with stream pollution where beyond a critical point the stream loses its ability to recover and the lack of oxygen causes an ecological imbalance which kills off most organisms and makes recovery extremely difficult.

In other words, the cost "created by" one plant may be zero until another plant adds its waste, after which it is very large. Certainly one could not assess the increase in cost solely to the last plant, since it would cost nothing if one of the other plants would treat its waste.

An instructive example is the situation in which the cost of eliminating the pollution is negligible, but the cost of enforcing that elimination is substantial. Suppose, indeed, that it would cost (in terms of resources devoted to inspection, administration, etc.) nearly as much to enforce the regulation as the total social costs of the pollution to be eliminated. Clearly it is still worth while eliminating the pollution. Who should pay for the costs? Should the pollution-producing firms be taxed to pay the costs of policing, as well as the costs of pollution control? How identify them once the law is passed? Certainly one cannot use the revenue from fines to pay the administrative costs, because with complete compliance there would be no fines. Can one tax any potential producer of pollution to pay for the pollution control?

F. IS QUANTIFICATION OF THE BENEFITS OF INCREASED EQUITY AND OF IMPROVED SOCIAL COST ACCOUNTING POSSIBLE?

From half a century of tortuous writing in the field of welfare economics, it is clear that verifiable scientific measurement is, in the strict sense, an impossible task. It is relatively easy to measure

the cost of accidents and the cost of operating any existing reparation system. But the benefits of the reparation system and of the improved social cost accounting which it may produce are impossible to quantify in the same sense. This means that in comparing different types of reparation or compensation systems, quantitative measurement is largely restricted to comparing the costs of accidents with the costs of the system. Comparisons of the benefits produced by the relative equity and cost-accounting characteristics of each system seem possible only on a qualitative basis.

Given this situation, it is tempting to conclude that small departures from optimal resource allocation, and small distortions in the distribution of wealth and income resulting from accidents, might well be ignored on the grounds that their social cost is probably small, and certainly small relative to the costs of a reparation system to determine and offset them.

The focus of economics on optimal conditions has not produced any quantification of the social losses resulting from departures from those optima. The completely avoidable departures, such as air and stream pollution, are simpler because whenever the costs of the enforcement system plus the costs of eliminating the causes of pollution are less than the estimated cost of the pollution, then the control system is worth installing, provided the income redistribution problems can be handled.

In the case of auto accidents there are no adequate grounds for believing that the proper cost allocation would either reduce accidents nor change the total amount of driving appreciably. Hence, the major benefits for which society presumably pays the costs of a reparation system are those arising from the spreading of costs, the avoidance of major distortions in the distribution of income and wealth. And these can apparently be handled by a direct loss insurance system (involving life insurance, disability insurance, and hospital-medical insurance), at less cost than by a system which imposes liability (with or without fault), and impels the

liable persons to buy liability insurance. One might well argue that the tort liability system is justified on the basis of its "justice" aspects, even with the watering-down in penalties through liability insurance. Some penalty carries over in higher insurance charges, though it would be more effective with compulsory insurance. Indeed, on grounds of welfare economics it is easier to argue the case for insurance extended to all accident losses without regard to fault, than for the tort liability system. And it would be easier to argue for more nearly complete loss spreading through wider insurance coverage, both on the resource allocation and equity grounds, and on the basis of the relatively low costs of the system.

This appraisal does not exclude the possibility that the liability system should be retained. Assuming that a loss insurance system would be better, the question would remain of how people are to be induced to buy the loss insurance which they need. Today, it is evident that they do not buy it; they rely instead on the demonstrably uncertain probability that they will get reparation through the liability system. The liability system on the other hand produces a high degree of insurance, because the threat of having all one's wealth taken by the arm of the law seems somehow more persuasive than the threat of losing it all in an uncompensated accidental injury.

Liability might also be retained for a variety of reasons which might be subsumed under the versatile concept of "justice." This might include the importance of dramatizing society's disapproval of negligence, even if the actual condemnation is liquidated by a liability insurance company. It might include the objective of vindicating the innocent injury victim, and assuaging his vengeful feelings toward the cause of his woe. These are objectives on which economic utility theory has little if anything to say.

PART II

THE MICHIGAN AUTOMOBILE INJURY SURVEY

Introduction

A. THE TARGETS

The Michigan automobile injury survey was undertaken because there is so much that needs to be learned and objectively recorded before citizens can make valid judgments about the reparation of personal injuries.

There was indeed much valuable information already at hand. It was possible to determine from published laws and statistics how much is paid to disabled persons, and to the survivors of deceased persons; in some areas one could even tell how much went to the automobile victims. One could also obtain estimates of total disability and death losses due to all causes, and specifically to automobile injuries. But these figures would not tell whether in individual cases everyone gets repaid three-fourths of his economic loss, or whether some get paid none of it while others get paid 200 percent. They would not tell whether most individuals draw on one or many sources of reparation. Least of all would they tell what factors seem to cause one individual to be better compensated than another, or how the beneficiaries of reparation systems perceive and appreciate their benefits.

There is much information in the reports of insurance companies on the number of claims made and paid, but it is oriented around the insured, rather than the injury victim. Although liability insurance adjusters estimate how much a claim is "worth," this is far from being an estimate of what the claimant lost; it is mingled with considerations of the degree of fault on both sides, the persuasiveness of the claimant's evidence, and the combativeness of the claimant and his lawyer. Furthermore, insurance companies do not record how much is paid by uninsured motorists, or even by insured motorists who are required to pay beyond insurance limits.

Attorneys' fees have been studied extensively in New York City,

but these studies tell nothing about the fortunes of injury victims who put their claims forward without benefit of counsel; nor do they tell anything about attorney representation in areas less urban than New York.

The survey was therefore designed in part to get information related to that available from other sources, but filling in the gaps, and covering neglected sectors. It was to show the overlaps and gaps in reparation, as well as the aggregates; it was to show the losses of individual victims, as well as what they are paid; it was to show the collection problems of unrepresented claimants, as well as of those with attorneys.

But the survey was also aimed at kinds of information which have not been collected at all. For instance, what kinds of people are the accident victims, in terms of wealth, education, and race? Are they representative of the entire population, or peculiarly bunched among the poor, the rich, the employed, or the unemployed? How do people feel about injury reparation? Are they satisfied or unhappy with its results? What are the reasons why people recover large or small amounts of reparation? Are they occasioned chiefly by differences in accident causation, in skill of attorneys, in availability of witnesses, or disposition to litigate?

These targets seemed enough for a single safari, and experience was to prove that they were more than enough. Left aside, therefore, were such alluring subjects as the ways in which accidents are caused, or in which they could be diminished or their severity alleviated. Inquiry into subjects such as these would have required teams of engineers, psychologists, and physicians, with attendant expenses and organizational problems which were beyond the reach of the present project.

B. ORGANIZATION OF THE SURVEY

From its preliminary stages, the survey has been jointly planned and directed by lawyers and economists, the latter being also researchers in the University of Michigan Survey Research Center.

Survey elements—the sampling design, the questionnaires, the response codes, the analytical patterns, and the statistical tables—were drawn up in the Center by teams of trained specialists.

Interviews were conducted by professional employees of the Center, except in rare instances which required completion of an interview by one of the supervisors or directors of the project.

C. THE PLAN OF THE SURVEY

In order to get a fair picture of automobile injuries, it was necessary to select a source of information from which a representative sample could be drawn. The police files of accident reports were chosen as the most nearly complete and unbiased source.

The choice of a year for observation presented greater difficulties. It had to be recent enough so that facts could be remembered, but long enough past so that most case histories would be complete (that is, so that the case would be "closed"). No year fitted the specifications exactly, so a combination of years was taken.

The primary time segment taken was 1958, and cases were taken at random from the police records of accidents in that year. These cases were generally closed by 1960, when the interviewing began, unless they had led to lawsuits. But in cases which had been sued on, the history was often incomplete. Therefore, no attempt was made to follow the history of cases which resulted in lawsuits. Instead, a sampling was made of cases filed in court in 1957. These cases involved accidents which had taken place in 1954, 1955, 1956, or even 1957, and they were now closed cases. The histories of these cases were substituted in the sample for the histories of the 1958 injuries which had gone to suit.

In order to keep the survey within a manageable size, it was decided to make detailed studies only of relatively serious injuries in the police sample, and to be content with very general information about the minor injuries in the police sample. In order to sift the police-reported injuries for serious cases, a two-page

mail questionnaire was sent to 2782 persons drawn from the police reports. This yielded some basic information on all classes of injuries, and also revealed 297 cases which were classified as "serious" and which were selected for more detailed investigation.

The 297 serious cases from the police sample, and the 207 cases from the court sample, became the subjects for the heart of the survey—a 40-page personal interview questionnaire administered by experienced interviewers in visits to the homes or places of business of the subjects. Each subject was asked an average of about 200 questions, covering the injury, the expenses and losses of all kinds incurred by the subject, the race, sex, education, and income of the subject, and his feelings about the injury, about how he had been treated, and about a number of related subjects. A fuller explanation of the survey design is given in Chapters 9 and 10.

Although this personal interview was the most complete which has yet been administered to a large sample of injury victims, it was not entirely satisfying. The survey directors were not sure that all injury victims were accurate about the amounts of the gross settlements which had been paid on their account, nor the amounts of their legal expenses. Responses to questions in the interview indicated that many of the respondents had rather vague ideas about what were the factors which aided or obstructed their recovery of a settlement, and which accelerated or delayed it. In order to get more light on these questions and others, a further study was designed which sought information from claimants' lawyers, defendants' lawyers, individual defendants, and hospitals, on various aspects of the same cases.

These supplemental surveys are of particular value for several reasons. First, they permit an evaluation of claimants' answers. Since a great many surveys have been conducted, and probably will be conducted, on the basis of the answers of injury victims alone, information on the biases likely to be found in victims' answers

will have manifold applications, in addition to improving the accuracy of the present survey.

Second, these answers permit an investigation of how other people—especially defendants—are affected by present reparation procedures.

Third, these answers supply opinions of a representative group of lawyers who have actual experience with injury cases on what happened and why it happened in specific cases.

Finally, the extent of difference in the way various interested parties see the same event provides a measure of one of the barriers to easy settlement of disputes.

D. RESULTS OF THE SURVEY

A summary of the results of the survey is presented in the following chapters.

The first of these (Chapter 4) presents estimates on Michigan injuries as a whole—those which were compensated and those for which no one even presented a claim, the serious and the minor, the litigated and the unlitigated.

Chapter 5 reports in much greater detail on the serious injuries: what kinds of injuries they were, how much loss was suffered by their victims, how much of the loss was paid for and from what source.

Chapter 6 also deals with serious injuries, but focuses attention on the process by which damages for injuries are claimed and recovered. It deals with the victim's decision to sue or not to sue, the "offer" which he gets from the defendant's insurance company, and how he reacts to it, how much lawyers are paid, and how long injury victims have to wait for payment.

Chapter 7 is devoted to cases filed in court. To some extent it is repetitive of material in prior sections, because most of what is true of "serious" injury cases is also applicable to court cases, most of which involve "serious" injuries. However, court-filed cases include some which were not classified as serious, so that the

quantities are a little different. It seems useful to present a separate view of the facts about court-filed cases because of their special interest to many persons concerned with judicial administration, and because many other studies have been and will be focused on this category of cases.

Chapter 8 is pointed in a rather different direction than the rest of the report. It might be called (if it were more complete) "The Psychology of Injury Reparation." It deals with what people who are involved in injury reparation think and feel about their experiences in this ordeal.

Chapters 9 and 10 contain condensed statements of survey methods and of technical measures of survey success. More detailed information, for the use of professional statisticians, can be obtained on request from the Survey Research Center.

One reminder should be given to the reader before he launches into Chapters 4 to 8, inclusive. In these chapters, he will find a large number of assertions about automobile injury victims—how they are involved in accidents, how much they lose monetarily, how much they get paid, and how they feel about various aspects of the aftermath of the accident. Most of these assertions are summaries of the statements of the accident victims, or of survivors of decedents and parents of injured children; a few of these assertions, where specifically indicated, are summaries of the statements of claimants' lawyers, defendants' lawyers, or individual defendants. In no case do they rest upon the personal observations of the study staff.

CHAPTER 4

Losses and Reparation Arising Out of Michigan Automobile Accidents Involving Personal Injury

For the year 1958, Michigan State Police reported about 59,100 automobile accidents occasioning personal injury, including the fatals with the nonfatals. Sampling of records indicated that some 101,500 individuals were involved in these accidents as injured persons or as drivers. In order to gain a better appreciation of the extent of the injuries sustained, the Study directors conducted an elementary questioning by mail of a sample of persons from this group. Drivers were questioned along with persons reported injured because of the probability that they too had suffered personal injuries. Because reparation payments frequently lump payments for property and for bodily injury, a fair picture can be obtained only by including property losses and reparation. In the more serious cases, the mail questionnaires were later supplemented with personal interviews. The results of the interviews and questionnaires were combined to prepare estimates of aggregate losses and reparation in Michigan automobile personal injury accidents.¹

A summary view of the composite estimates is given in Tables 4-1 and 4-2. Their meaning will be further explained in this chapter.

A. THE ECONOMIC LOSSES OF SERIOUS INJURY VICTIMS

1. *What Was Measured*

In order to provide some gauge of the seriousness of injuries and of the sufficiency of the reparation received on account of them, it was necessary to devise some measure of loss. Immediately a sharp distinction was encountered between those losses which

¹ Survey methods are more fully described in Chapter 9, *infra*.

are ordinarily perceived by people as dollar losses—however uncertain in amount—and those which are not so measured except in the unobservable processes of jury verdicts and judicial findings. Among the former group are losses paid or incurred for medical service and auto repair, losses through destruction of property which has a market value (whether replaced or not), and losses of income which would have been received in dollars or in the value of services if the injury had not been suffered. These are called “economic losses.”

In the latter group are losses of comfort and happiness, identifiable as physical pain, mental shock, and bereavement caused by the death or the incapacitation of a family member; these are grouped under the name of “psychic losses.” No feasible way was found for estimating psychic losses, and they are therefore excluded from the study.²

Whether or not *economic* losses are covered, or not covered, or more-than-covered, seems significant even though no statement can be made about *total* losses. Therefore the survey deals in terms of economic losses, but not of psychic losses. This should be kept in mind as the amounts of loss are reported, and particularly when comparisons are made between loss and reparation. Sometimes, to avoid tiresome repetition, the full term of “economic loss” is shortened to the more convenient “loss.” But wherever amounts are referred to, they are amounts of economic loss, not of total loss.

Even among economic losses, there are all degrees of measurability. For a first category, comprising the most measurable, the

² If psychic loss were to be objectively estimated, it would seem appropriate not only to measure the gross loss through pain, shock, and bereavement, but also deduct the “secondary gain” which psychiatrists recognize as arising from the attention and sympathy of friends, and from the vindication involved in getting paid, or obtaining a favorable jury verdict. This would yield *net* psychic loss. Economic losses as estimated in this study are net, since the amount which an injured person can earn at a substitute job is deducted from what he has lost in his original job; in the case of death, a deduction was made for the cessation of consumption. See Chapter 9.

For a discussion of psychic “secondary gain” through compensation and vindication, see “Neurosis and Trauma,” American Psychiatric Association Round Table Meeting, 1960.

survey recorded all property damage and all expenses already paid or incurred on account of personal injury at the time of interview. The chief items were medical bills, burial expense, damage to automobiles or other property, and the costs of collecting compensation. These are called "expenses incurred."

In a second category, the survey placed income loss, both past and future (that is, before and after the time of interview).³ Future income loss in cases of death or permanent disability was estimated by making certain assumptions about the probable length of the injury victim's working life (absent the injury), and about the amounts which he would have earned if not injured; all amounts were discounted to the time of injury. The methods of calculation are explained in Chapter 9.

A third major category of loss was expected future expenses, of which medical expense was the only important category.

These three categories of loss—(1) expenses paid or incurred, (2) lost income, past and future, and (3) future expenses—were added to estimate "total economic loss."

It will be obvious that the survey has attempted to measure only *individual* loss, not *social* loss. Attention has been directed to differences in individual incomes and expenses caused by injuries, not to differences in the individuals' entire social product.

Some social losses may have crept into the calculation, because of the difficulty of excluding them. For instance, the contribution which an injured worker would have made to taxes had he not been disabled is included in the survey's income figures, which are not net of taxes. But many social losses are obviously omitted; one

³ In other recent surveys, recorded losses have included income loss up to the time of interview, but excluded future income losses. Cost of Motor Vehicle Accidents to Illinois Motorists, 1958, Illinois Department of Public Works and Buildings, Division of Highways, 1962; Clarence Morris and James C. N. Paul, "The Financial Impact of Automobile Accidents," Univ. of Penn. Law Rev., Vol. 110 (1962), p. 913. This would seem to give somewhat capricious results unless the interviews were conducted at a fixed interval after the date of accident. Perhaps it would be useful if future surveys could measure past income loss to the time of settlement, if any, and otherwise to some standard period such as one or two years.

TABLE 4-3

*Aggregate Amounts of Economic Loss of Various Types
(personal injury accident cases)*

<i>Type of loss</i>	<i>Aggregate amount (in millions of dollars)</i>	<i>Percent of aggregate amount</i>
<i>Income loss (past and future)</i>	\$ 91.9	51%
<i>Expenses incurred</i>	79.8	45
Property damage	37.6	21
Medical and burial	27.8	16
Compensation collection	11.8	7
Other	2.6	1
<i>Expected future expenses</i>	6.5	4
Medical	4.8	3
Other	1.7	1
Total economic loss (past and future)	\$178.2	100%

example is the cost to an employer of employee turnover caused by an injured person's absence; another is the contributions which injured persons would have made to their schools, churches, political parties, and clubs.

2. The Aggregate Losses

The aggregate economic losses for 1958 were estimated at approximately \$178.2 millions—roughly 1 percent of the annual personal income of Michigan residents⁴ for that year. The greatest item of loss was income (past and future), which was 51 percent of the total loss. Next came property damage—about 21 percent—and then medical or burial expenses, which were about 19 percent if anticipated future expenses were included. Legal and other compensation collection expenses amounted to about 7 percent of the entire loss. These aggregates are shown in Table 4-3.

Although these estimates include property loss, it is only the

⁴ Aggregate personal income for Michigan in 1958 was estimated at \$16,507 millions. Statistical Abstract of the United States, 1960, p. 310.

property loss incurred in accidents which also involved personal injury. No attempt was made by the present survey to determine the extent of property losses in nonpersonal-injury accidents. But it may be interesting to compare the results of an Illinois survey which covered all types of automobile accidents occurring in 1958. That survey indicated that property damage in the nonpersonal-injury accidents amounted to more than two and a half times the property damage in the personal injury accidents. If the same relationship existed in Michigan, total automobile accident costs would be at least \$90,000,000 higher than the estimate made here for personal injury automobile accidents alone.⁵

TABLE 4-4

*Persons Sustaining Economic Loss of Various Types
(personal injury accident cases)*

<i>Type of economic loss</i>	<i>Number of persons</i>	<i>Percent of persons</i>
<i>Income loss (past and future)</i>	24,000	28%
<i>Expenses incurred</i>	85,100 ^a	99 ^a
Property damage	58,700	68
Medical	50,800	59
Burial	1,700	2
Compensation collection	11,900	14
Other	6,000	7
<i>Expected future expense</i>	3,400	4
Medical	3,200	4
Other	200	*
Total incurring economic loss	86,100	131%^b

* Less than 1/2 of 1 percent.

^a The percents and the number of persons for the various kinds of expenses incurred add to more than the total because many persons had more than one kind of expense.

^b The percents for the various types of loss add to more than 100% because many persons sustained more than one type of loss.

⁵ Cost of Motor Vehicle Accidents to Illinois Motorists, Illinois Department of Public Works and Buildings, 1962, Table C1-01.80-1.

3. *The People Who Lost*

The losses were suffered by about 86,100 people. Some of these sustained only property loss, others only incurred medical expenses, others merely missed wages or commissions, and still others sustained two or three kinds of loss at the same time. Property loss was sustained by the largest number—58,700, or about 68 percent of all persons sustaining any economic loss. Medical expenses were incurred on behalf of about 50,800 persons (59 percent). About 24,000 persons, or 28 percent of all the losers, lost income because of the accident. The figures are shown in Table 4-4.

A striking feature of the distribution of losses is the numerical predominance of cases with low amounts of loss. Although the range of reported economic losses for a single person went from zero to nearly \$200,000, 64 percent of the individuals had losses of less than \$500. Ninety-four percent had losses of less than \$3000. The persons whose injuries occasioned economic losses of \$10,000 or more accounted for only about 3 percent of the entire number of automobile injury victims.

TABLE 4-5

*Number of Persons Sustaining
Various Amounts of Economic Loss
(personal injury accident cases)*

<i>Amount of economic loss</i>	<i>Number of persons</i>	<i>Percent of persons</i>
\$1—499	55,400	64%
\$500—2999	25,500	30
\$3000—9999	2,800	3
\$10,000 or more	2,400	3
Total	86,100	100%

But when one turns from numbers of persons to aggregate amounts of money, one finds the scale weighted in the other direction. The losses of less than \$500, despite their large number, account for less than a twelfth of the aggregate loss. At the other

TABLE 4-6

*Aggregates of Economic Loss Sustained in Various Amounts
(personal injury accident cases)*

<i>Amount of economic loss</i>	<i>Aggregate economic loss (in millions)</i>	<i>Percent of aggregate economic loss</i>
\$1—499	14.3	8%
\$500—2999	46.7	26
\$3000—9999	15.7	9
\$10,000 or more	101.5	57
Total	\$178.2	100%

end of the scale, one observes that the relatively few losses which exceed \$10,000 account for over half of the aggregate loss.

Reading Tables 4-5 and 4-6 together, one sees that the 3 percent of persons who suffered very large losses incurred 57 percent of the aggregate economic loss, while only 8 percent of the aggregate was incurred by the 64 percent of persons with small losses.

TABLE 4-7

*Comparison of Numbers Sustaining Economic Losses,
and Aggregate Amounts Sustained
(personal injury accident cases)*

<i>Amount of economic loss</i>	<i>Percent of persons</i>	<i>Percent of aggregate economic loss</i>
\$1—499	64%	8%
\$500—2999	30	26
\$3000—9999	3	9
\$10,000 or more	3	57
Total	100%	100%

B. THE REPARATION OF LOSSES

Although about 86,100 persons suffered economic loss in personal injury automobile accidents, only about 65,900 had

TABLE 4-8

*Persons Receiving Reparation from Various Sources
(personal injury accident cases in which
some reparation was received)*

<i>Source of reparation</i>	<i>Number</i>	<i>Percent</i>
<i>Injury victims' own insurance</i>	41,200	63% ^a
Automobile insurance	24,300	37
Medical insurance	19,700	30
Life and/or burial insurance	900	1
Other own insurance	700	1
<i>Tort liability settlements</i>	32,100	49
<i>Miscellaneous</i>	4,100	6 ^a
Employer (including sick leave)	2,500	4
Workmen's compensation	700	1
Social security or other pensions	600	1
Other	2,000	3
Total receiving reparations	65,000	118% ^b

^a The percent and the number of persons receiving reparation from various sources add to more than the total because many persons reported reparation from more than one source.

^b The percents add to more than 100% because some received reparation from more than one source.

received any reparation at the time the questionnaire was completed.⁶

If the various types of loss insurance—life, burial, health, and “automobile”—are viewed as one “source” of reparation, it is clearly the source which benefited the largest number of accident victims. Sixty-three percent of the losers gained some reparation

⁶ The stated number of persons receiving reparation excludes a small number who expected to receive future reparation, but had received none at the date of the questionnaire or interview. These equaled about one-eighth of 1 percent of the 65,900 who received reparation.

Included among those who received reparation were a small number—about half of one percent—who did not sustain economic loss. In order to minimize complications in tables and text, these persons have been included in the text and tables, and treated as though they had sustained economic losses of very small amounts.

TABLE 4-9

*Aggregate Reparation Received from Various Sources
(personal injury accident cases)*

<i>Source of reparation</i>	<i>Aggregate amount (in millions)</i>	<i>Percent of aggregate amount</i>
<i>Tort liability settlements</i>	\$46.7	55%
<i>Injured person's own insurance</i>	32.2	38
Automobile insurance	17.5	21
Medical insurance	10.1	12
Life and/or burial insurance	4.4	5
Other own insurance	.2	*
<i>Miscellaneous</i>	6.3	7
Social security	1.8	2
Employer (including sick leave)	.9	1
Workmen's compensation	.2	*
Other	3.4	4
Total reparation received	\$85.2	100%

* less than ½ of 1 percent

from loss insurance; 37 percent received something from their automobile insurance, and 30 percent got something from medical insurance (some receiving from both types of policy).

The next most important source of reparation was tort liability, meaning the amounts paid by or on behalf of persons who might be found guilty of negligently causing the accident. Most of this was paid by liability insurance companies, and it helped more people than did any single one of the loss insurance lines. Forty-nine percent of the people who got any reparation received some from this source.

These calculations take no account of the number of persons who expected some future reparation; but including them would have added only about an eighth of one percent to the persons

reported on. Table 4-8 shows the distribution of persons with respect to reparation received from various sources.

If attention is turned from the *number of people* receiving reparation from various sources to the *amount* of reparation received, tort settlements take a commanding lead over all other reparation sources. About \$85.2 million were received by accident victims, of which about 55 percent came from tort liability settlements. Thirty-eight percent came from private loss insurance (chiefly automobile, medical, and life). About 7 percent came from other sources such as sick leave, workmen's compensation, and social security. Respondents expected to receive about \$8,431,300 in future reparation, but these amounts were not included in the totals because of the probable inaccuracy of such estimates. The distribution of aggregate reparation among sources is shown in Table 4-9.

Even more interest attaches to distribution of reparation in terms of amounts per person. Most of the injury victims had very small amounts of reparation, just as many had very small amounts of loss. About a quarter of the losers received no reparation at all, and two-thirds of all those sustaining loss received less than \$500.

TABLE 4-10

*Persons Receiving Various Amounts of Reparation
(personal injury accident cases in which
economic loss was sustained)*

	<i>Number</i>	<i>Percent</i>
<i>Total receiving no reparation</i>	20,200	23%
<i>Total receiving reparation</i>	65,900	77%
<i>Amount received</i>		
\$1—499	36,200	42
\$500—2999	24,500	29
\$3000—9999	4,000	5
\$10,000 or more	1,200	1
<i>Total suffering loss</i>	86,100	100%

At the other end of the spectrum, the number who received total reparation exceeding \$10,000 was about 1 percent. The full distribution is shown in Table 4-10.

Some interest will attach also to the amounts received by way of tort settlement—the largest single source of reparation. The survey showed that 63 percent of the persons sustaining loss got nothing via the tort route. Another 22 percent got less than \$500,

TABLE 4-11

*Number of Persons Receiving Tort Settlements of Various Amounts
(personal injury accident cases in which
economic loss was sustained)*

	<i>Number</i>	<i>Percent</i>
<i>Total receiving no tort settlement</i>	54,000	63%
<i>Total receiving a tort settlement</i>	32,100	37
<i>Amount received</i>		
\$1—499	18,900	22
\$500—2999	10,200	12
\$3000—9999	2,400	2
\$10,000 or more	600	1
<i>Total suffering loss</i>	86,100	100%

TABLE 4-12

*Aggregates of Tort Settlements of Varying Amounts
(personal injury accident cases in which
a tort settlement was received)*

<i>Amount of tort settlement</i>	<i>Aggregate amount (in millions)</i>	<i>Percent of aggregate amount</i>
\$1—499	\$ 4.9	10%
\$500—2999	16.3	35
\$3000—9999	11.2	24
\$10,000 or more	14.4	31
<i>Total</i>	<i>\$46.8</i>	<i>100%</i>

TABLE 4-13

Number of Persons Receiving Tort Settlements of Varying Amounts Compared With Aggregate Amounts Received (percentage distribution of personal injury accident cases in which a tort settlement was received)

<i>Amount of tort settlement received</i>	<i>Percent of persons</i>	<i>Percent of aggregate amount</i>
\$1—499	59%	10%
\$500—2999	32	35
\$3000—9999	7	24
\$10,000 or more	2	31
Total	100%	100%

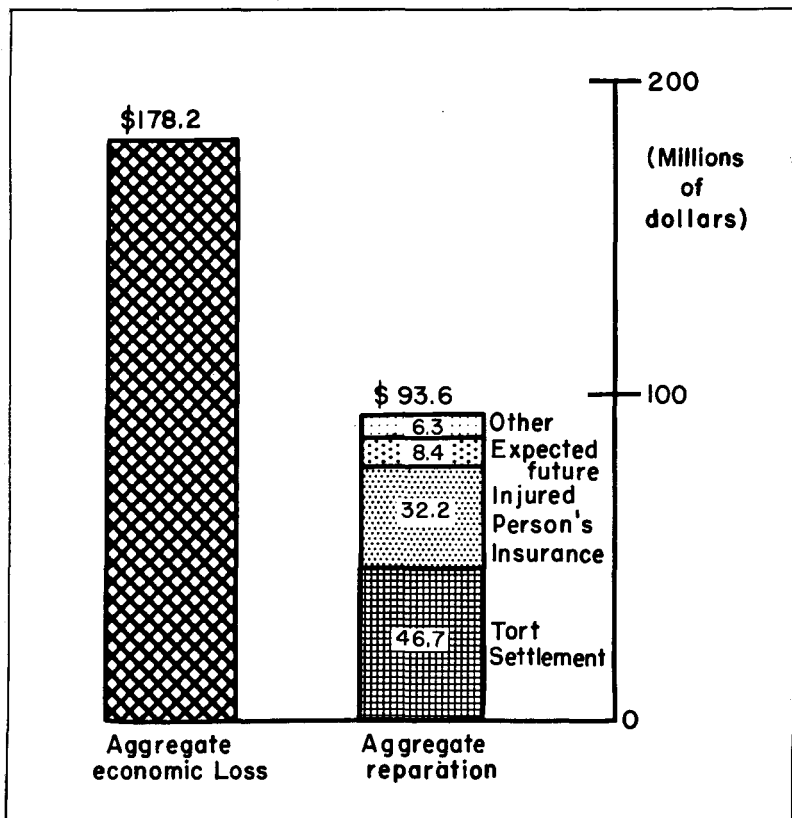
while the number receiving over \$10,000 was less than 1 percent. The distribution appears in Table 4-11.

Although the majority of tort settlements are for less than \$500, these settlements do not claim a majority of the dollars paid. A very small number of settlements in the over \$10,000 bracket claim a larger aggregate sum, as shown in Table 4-12.

An interesting comparison can be made of the number of persons who received small or large settlements, and the aggregate amounts which they received. The smallest class of cases, with settlements of under \$500, embraced 59 percent of the people but only 10 percent of the money. The largest class of cases, with settlements of over \$10,000, comprised only 2 percent of the people, but collected 31 percent of the money. The distribution is shown in Table 4-13.

These distributions take on significance in view of various proposals which have been made for relieving the tort process of handling the very small claims, or for limiting very large recoveries. If all the small settlements were eliminated, the aggregate pay-out would be reduced by only 10 percent. If the small

FIGURE 4-1—AGGREGATE ECONOMIC LOSS COMPARED WITH
AGGREGATE REPARATION
(Amounts in personal injury accident cases)



and the large settlements were both eliminated, 59 percent of the aggregate pay-outs would still remain unaffected. The big bulge, as usual, is in the middle.

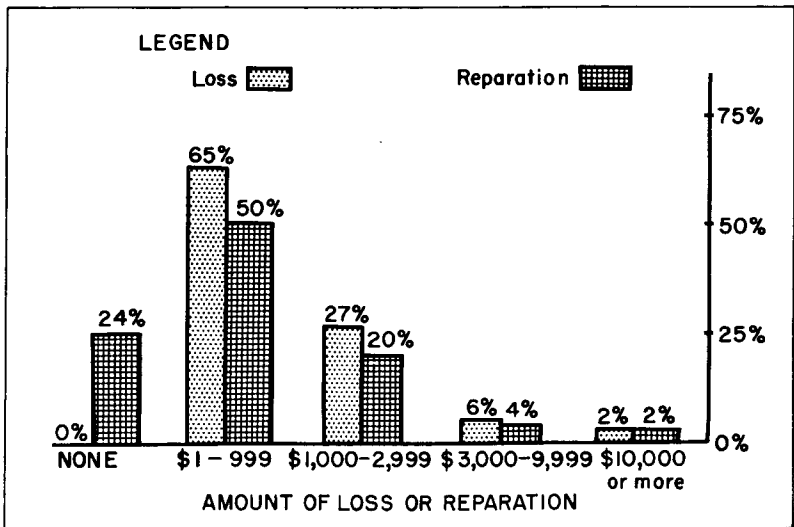
The effects of such proposals might, of course, be very significant in other dimensions. Since more than half the claims fall in the smallest bracket, any change which reduced the administrative cost of handling each case, or which produced a greater sense of satisfaction, might have very important consequences.

C. COMPARISONS OF REPARATION AND LOSS

Comparisons of reparation and of loss may be made in various ways. First, one may compare the totals; but for this purpose one should add the expected future reparation to that already received. This will show aggregate reparation (received or expected) of about \$93.6 millions, which may be compared with aggregate losses of about \$178 millions. Figure 4-1 supplies a graphic presentation.

This leads to some interesting reflections on the extent to which losses are shifted, and to which they are borne by their primary victims. Since losses exceed reparation by about \$84.6 millions, it appears that at least 47 percent of the losses are not shifted at all. To the extent that some of the reparation is received by persons who have lost less than what they receive, the unshifted loss must be even greater.

FIGURE 4-2—AMOUNTS OF INDIVIDUAL ECONOMIC LOSS COMPARED WITH AMOUNTS OF INDIVIDUAL REPARATION
(Percentage distribution of personal injury accident cases with loss)



For the other half of aggregate loss, which *is* shifted, there are some interesting differences in the kind of shift. About \$32.2 millions in reparation, amounting to 18 percent of total losses, came from injured persons' own insurance. If their amounts of reparation were small they probably received no more than they had themselves paid in over the lives of their policies; this would commonly be true under medical and automobile insurance policies. Thus there was a sharing of risk among policyholders, but no "social cost accounting" by shifting the losses from a victimized group to a loss-causing group. Some of the "future reparation," consisting largely of pension payments, would also be the product of the injured persons' own contributions.

Only the approximately \$47 millions of tort settlements, equal to 26 percent of loss, can be considered as potentially shifting the aggregate losses from those who should not bear them to those who should.

Another interesting comparison may be made between the distribution of amounts of individual loss, and amounts of individual reparation. It has already been shown that the majority of persons are in the lower brackets for both losses and reparation. For reparation many are in the lowest bracket of all, which is "zero." A graphic comparison is made in Figure 4-2.

A visual inspection of Figure 4-2 might suggest that most people receive in reparation about what they lose, except that a third of the small claimants get nothing. On the other hand, it would be possible to achieve the same degree of conformity if some of the injury subjects in all brackets received reparation equal to twice their loss, while a compensating number received only half. Because of the form in which the data were collected, it is not possible to say which hypothesis is applicable to the cases covered by these figures. However, in the study of "serious injury cases" a case-by-case comparison of loss and reparation was made; this will be reported on in Chapter 5.

D. THE ROAD TO A TORT SETTLEMENT

One of the most striking aspects of injury victims is the small number who eventually have their day in court. Of about 86,100 persons who suffered loss in personal injury accidents in 1958, well over half abandoned their potential tort claims without employing a lawyer, while another quarter obtained settlements by their own efforts. More than six-sevenths of all potential claims were dropped or settled without a lawyer's becoming involved; the fraction which lawyers represented constituted about one-seventh of all the loss cases.

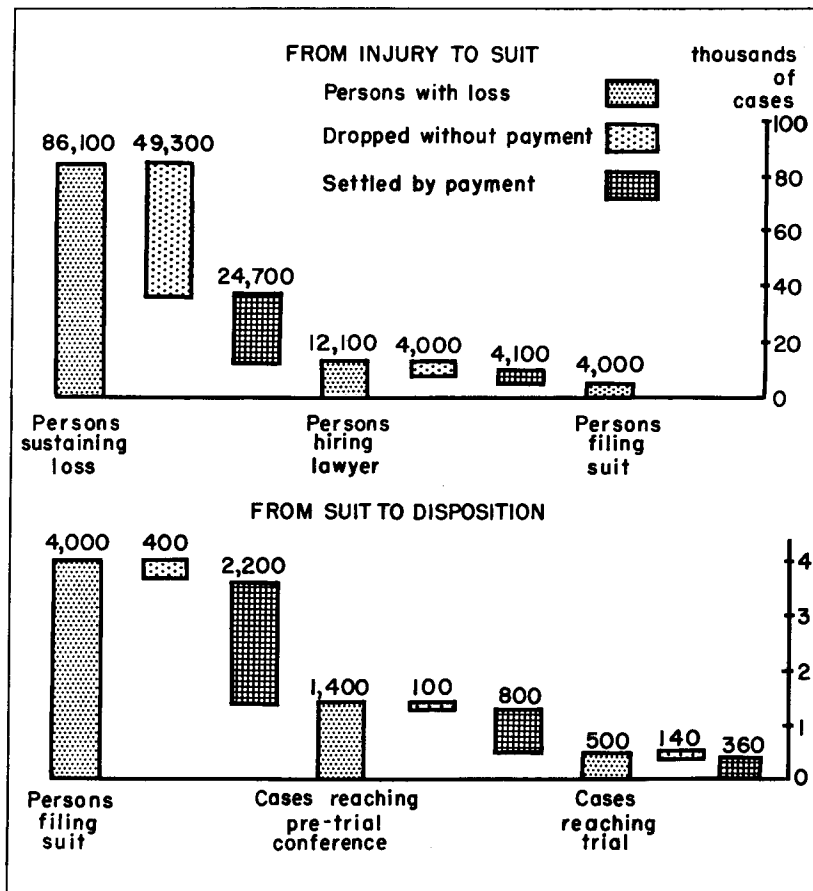
Of the claims handled by lawyers, about 8000 out of 12,100 were dropped or settled without suit, while about 4000 went on to suit. After suit, the elimination process continued, so that almost two-thirds of the suits were dropped or settled before pretrial conference, and about another quarter before trial. Only about 500 cases remained for trial.

Of the cases that went to trial, about a third were terminated without payment, while two thirds were "settled." "Settlement" as used here includes all cases in which a payment was made to discharge liability, even if made pursuant to a final judgment; in most, if not all, cases there was still the possibility of an appeal which was "settled" by payment.

The disposition of potential claims at various stages is presented graphically in Figure 4-3. Because of the wide differences in amounts, they must be shown on separate scales.

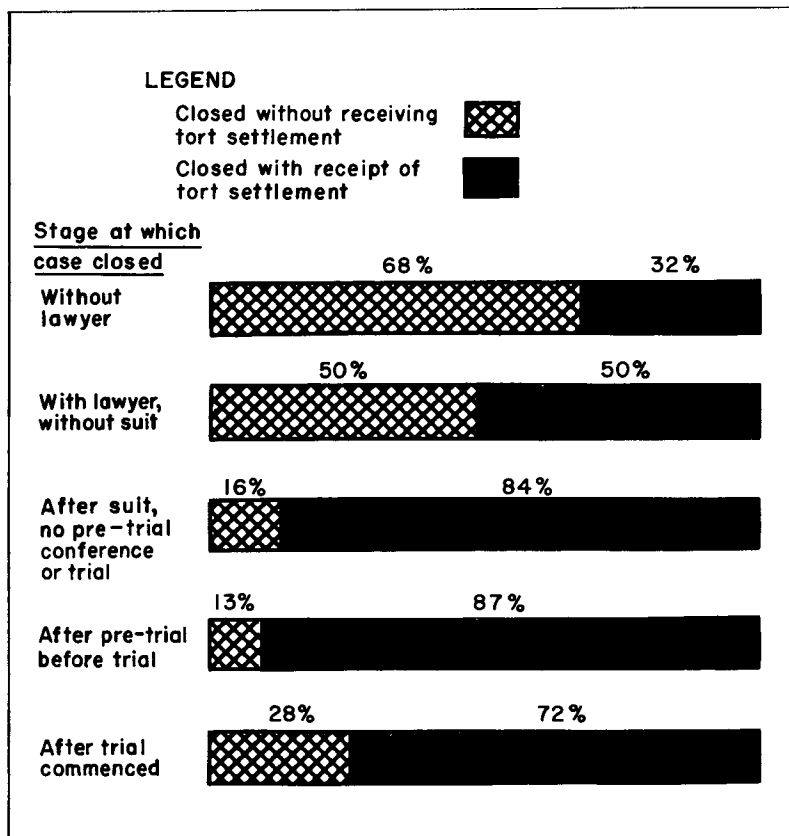
Some interesting differences appear in the dispositions of claims at different stages. First, there was a significant increase in the proportion of cases terminating favorably to the injury victim at every stage up to the last. Of those closed without hiring a lawyer, 32 percent ended in settlement. Of those closed after hiring a lawyer but before suit, 50 percent ended in settlement. Of those closed after suit but before the pretrial conference, 84 percent

FIGURE 4-3—NUMBER OF CASES REACHING VARIOUS STAGES OF CLAIM AND LITIGATION
(Personal injury accident cases)



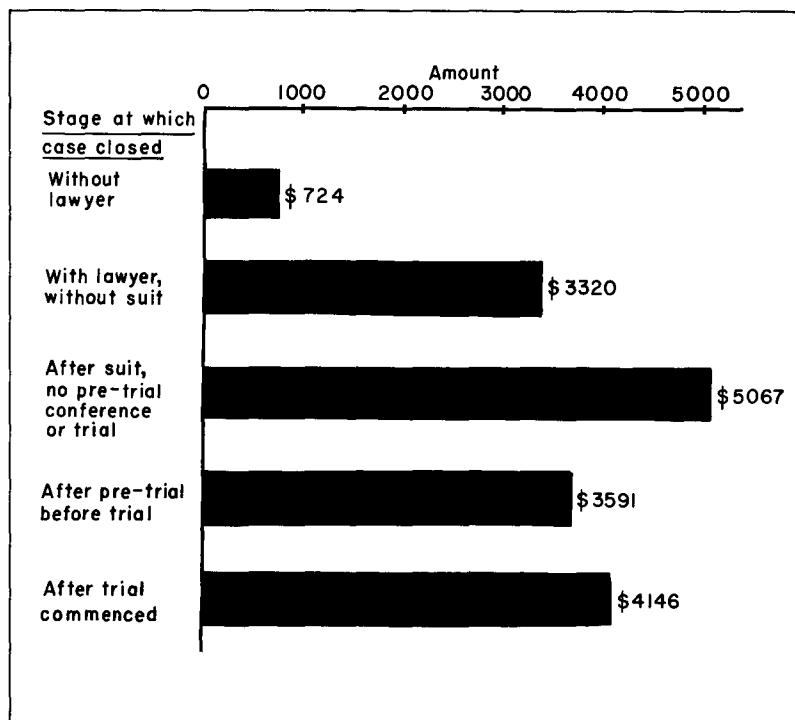
ended in settlement. But in cases closed after the commencement of trial, the number settled drops back to 72 percent (Figure 4-4).

FIGURE 4-4—NUMBER OF PERSONS RECEIVING TORT SETTLEMENTS AT SUCCESSIVE STAGES OF CLAIM AND LITIGATION
(Percentage distribution of personal injury accident cases)



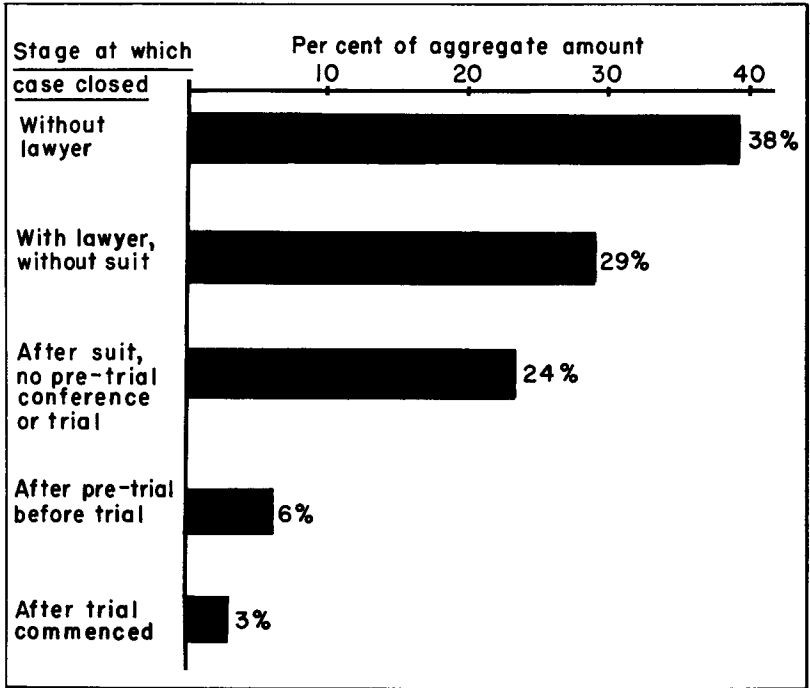
Second, a comparison may be made of the mean amounts of the settlement at successive stages. There is a distinct jump from the cases settled without a lawyer to those settled with; but there is no distinct pattern in the succeeding stages of litigation (Figure 4-5).

FIGURE 4-5—AVERAGE AMOUNTS OF TORT SETTLEMENTS RECEIVED AT SUCCESSIVE STAGES OF CLAIM AND LITIGATION
(Mean amounts in personal injury accident cases in which a settlement was received)



Third, a comparison may be made among the aggregate amounts of settlements made at the various stages. About 38 percent of the aggregate payments are made to injury victims not represented by lawyers; 29 percent are made to claimants who have lawyers but have not filed suit; about 24 percent after filing suit, but before pretrial conference. About 9 percent of the money paid out in settlements is paid after the pretrial conference (Figure 4-6).

FIGURE 4-6—AGGREGATE AMOUNTS OF TORT SETTLEMENTS RECEIVED AT SUCCESSIVE STAGES OF CLAIM AND LITIGATION (Percentage distribution of aggregates in personal injury accident cases)



CHAPTER 5

The Serious Injury Cases

A. THE SIGNIFICANCE OF SERIOUS INJURIES

In viewing the social and economic consequences of automobile injuries, one is quickly struck by the great differences in the consequences of major and of minor injuries. The former create great losses to the productivity of economic society; they are likely to result in catastrophic impoverishment of a family, with attendant deterioration of moral and social values; they bring on moving personal tragedies; and they form the bulk of the litigation that crowds the courts.

"Minor" injuries are important, too. They affect ten times as many people, and may contribute as much to the cost of driving an automobile (via liability insurance premiums) as the major ones. But they are different, and different questions must be pursued in studying them.

In view of the limited resources at the disposal of the project, the directors had to choose which end of the injury spectrum should be emphasized, and the "serious" end was chosen. It was chosen partly because the problems posed by serious injuries seemed of more pressing importance, and partly because other studies which were expected to produce ample information on minor injuries were known to be in progress in New York City and in Philadelphia.¹

An arbitrary definition of serious injuries was chosen; they were injuries which (1) required hospitalization for three or more weeks; (2) occasioned hospital and medical expenses of \$500 or

¹ These studies were eventually published as follows:

Roger B. Hunting and Gloria S. Neuwirth, *Who Sues in New York City?* (New York: Columbia University Press, 1962).

Clarence Morris and James C. N. Paul, "The Financial Impact of Automobile Accidents," *Univ. of Penn. Law Rev.*, Vol. 110 (1962), p. 913.

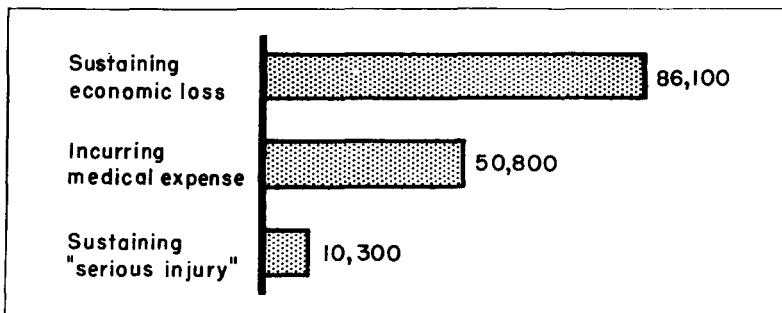
more; or (3) occasioned death or some degree of permanent physical impairment. All other injuries were classified as "minor."

Serious injury cases for study were drawn partly from police records and partly from court records. But neither set of records was sufficient to enable the investigators to determine in advance which cases would prove to be "serious" within the chosen criteria. Therefore it was necessary either to interview all persons in the sample and determine retrospectively which cases were serious, or to give an initial screening questionnaire. For the police sample, the latter alternative was chosen; 2872 persons were sent screening questionnaires, which indicated that 228 of them were serious injury victims. For the court questionnaire, the other alternative was followed; of 126 persons interviewed, 92 proved to be "serious" cases.

From the screening questionnaire, it appeared that there were approximately 10,300 "serious" injury victims in Michigan in 1958. This number may be compared with the 51,800 who incurred some medical expense from personal injury, or with the 86,100 who sustained some economic loss (including lost time or damaged property) in personal injury accidents. The quantities are graphically compared in Figure 5-1.

When all the facts were in, some of the injuries which had

FIGURE 5-1—PERSONS SUSTAINING LOSS, MEDICAL EXPENSE, AND SERIOUS INJURY
(Number of persons in automobile accidents involving personal injury, Michigan 1958)



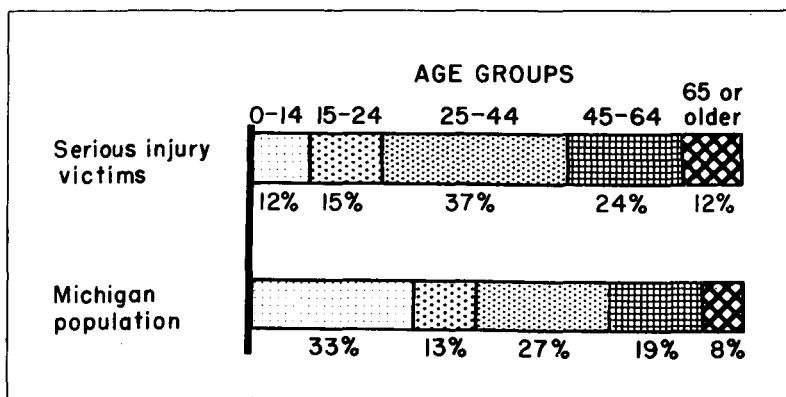
qualified under the "serious" tests did not appear to be as "serious" as expected. These were chiefly cases in which persons reported "permanent impairments" which did not seem to occasion a great loss of function, although they may have caused continued discomfort or disfigurement. They were retained in the sample, and serve to explain the small amounts of "economic loss" which appear in some of the "serious" cases.

B. THE SERIOUS INJURY VICTIMS

1. *Who Are They?*

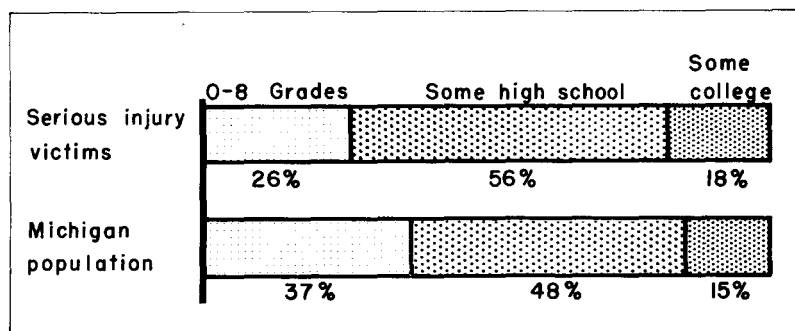
The number of persons who sustained serious automobile injuries in Michigan for 1958 is estimated at 10,300. This was 0.13 percent of the Michigan population in that year. The percentage of males among them was 52 percent, in contrast with the approximately 50 percent of males in the state population—a variance which is easily explained by the larger number of males whose occupations take them out on the highways. In age they differed more significantly from the entire population, 61 percent falling between the ages to 25 and 65, as against 46 percent for the state population (Figure 5-2).

FIGURE 5-2—AGES OF SERIOUS INJURY VICTIMS
(Percentage distributions of serious injury victims
and of Michigan population)



An attempt was made also to determine whether the injury victims are concentrated in any particular segment of the socio-economic scale. Respondents' answers indicated that the high school and college educated groups represented a slightly larger fraction of the serious injury victims than they represent in the entire Michigan population. In other words, those who had gone to high school or college were somewhat more likely to sustain automobile injuries than those who had not (Figure 5-3).

FIGURE 5-3—EDUCATION OF SERIOUS INJURY VICTIMS
(Percentage distributions of serious injury victims
and of Michigan population)



With respect to income, the answers indicated that the serious injury victims had a somewhat lower distribution of family incomes than the population at large (Figure 5-4). This may be attributable to the fact that the answers related to family income *after* the accident, and many of the respondents were former breadwinners who had been disabled, or the survivors of breadwinners who had been killed. If the same question could have been asked before the accident, it seems likely that the same people would have shown higher-than-average incomes, in view of the fact that they showed higher-than-average education.

2. How Were They Injured?

The survey did not record or analyze accident causes, but it did

FIGURE 5-4—FAMILY INCOME
(Percentage distributions of serious injury victims
and of Michigan population)

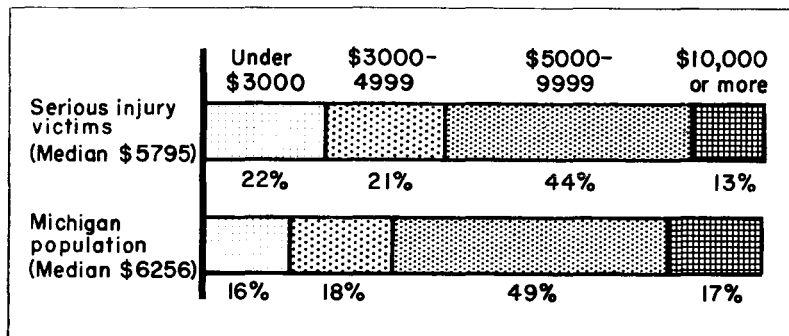
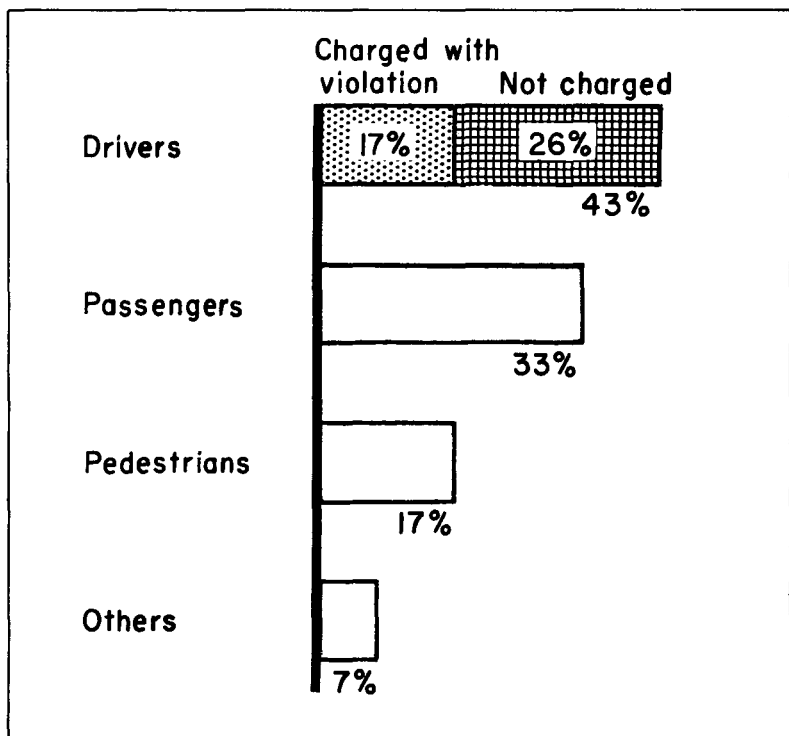


FIGURE 5-5—ACCIDENT ROLES
(Percentage distribution of persons seriously injured)



record the roles of serious injury victims as drivers, passengers, pedestrians, and "others" (such as bicycle and motor scooter riders). Drivers were the most numerous group, comprising 43 percent of the seriously injured, followed by passengers and pedestrians. It appears that three-fourths of all serious injury victims were people in automobiles.

Of the drivers who were seriously injured, about two-fifths were charged by police with traffic violations, while three-fifths were not (Figure 5-5).

C. THE ECONOMIC LOSSES OF SERIOUS INJURY VICTIMS

1. *The Measurement of Losses*

Economic losses of persons who sustained serious injuries were measured for the most part in the ways already explained in Chapter 4. Psychic losses were excluded; income losses were discounted to the time of injury; losses suffered by unidentified individuals or by society at large were ignored. A comprehensive view of the resulting loss estimates is presented in Table 5-1.

One important departure will be made in this chapter from the classification of losses employed in Chapter 4 and in Table 5-1, opposite. There, "losses" included the expense incurred by injured persons in collecting reparation. In other words, lawyers' fees were included along with doctors' fees as "losses" resulting from the injury.

This treatment is satisfactory for calculation of aggregates, and corresponds to the treatment in some other surveys.² However, it

² Cost of Motor Vehicle Accidents to Illinois Motorists, 1958, Illinois Department of Public Works and Buildings, Division of Highways, July 1962, p. xxii., definition of "direct costs." The same definition of "direct costs" has been employed in highway department surveys in Massachusetts, New Mexico, Utah, and Ohio.

On the other hand, collection expenses were excluded from the "tangible loss" in the Philadelphia study of Clarence Morris and James C. N. Paul, "The Financial Impact of Automobile Accidents," Univ. of Pennsylvania Law Review, Vol. 110 (1962), p. 913.

creates obstacles to detailed case analysis. If collection fees are added to the losses, they cannot also be deducted from the reparation. This would be double counting. But if they are not deducted from the reparation, a false view is given of the amounts of money which individuals receive.

For useful case study, it is better to regard collection expense as a deduction from the amount of reparation received, and to exclude it when totaling the losses which result from an injury. This is the treatment which will be followed in the remainder of the present chapter.

2. Illustrations

To show how the calculations of loss work out, a few case studies from the survey will be presented under fictitious names.

Al Atwood was at the time of the accident a 42-year-old man with a wife and four sons ranging from 4 to 19, and he earned about \$15,000 a year. As a result of an automobile accident he received a fractured skull and a brain injury which will prevent him from ever working again. Although he has lost no muscular functions, his personality is so changed that he has lost all his social friends and is barely tolerable to his own family. His economic losses were calculated as follows:

Total expenses incurred		\$ 3,119
Medical expense	\$1,619	
Property loss	1,500	
	<hr/>	
Income loss		184,890
Miscellaneous items		5,669
Total economic loss		<hr/> \$193,678

Barbara Brent was a widow of the age of 58 who lived with her son-in-law. She did not keep house and had not worked outside the home for about 35 years. In an automobile accident, her clavicle was broken and never knit properly, so that it created a projection. There was some possibility of a future operation for

further treatment, but it seemed doubtful that it would help, and even more doubtful that it would ever be done, so it was excluded from the calculation of loss. The calculation of her economic loss was as follows:

Total expenses incurred		\$ 575
Medical expense	\$305	
Other expenses	270	
	<hr/>	
Income loss		None
Total economic loss		<hr/> \$ 575

Charlie Conn was another 42-year-old worker who suffered head and knee injuries, both of which required several stitches. The head and knee are now fully functional, but Charlie also sustained a spinal injury which causes him pain whenever he lifts or pushes heavy objects. In spite of this permanent disability, Charlie missed only two weeks' work, and now earns the same wage as he did before. His economic loss was calculated as follows:

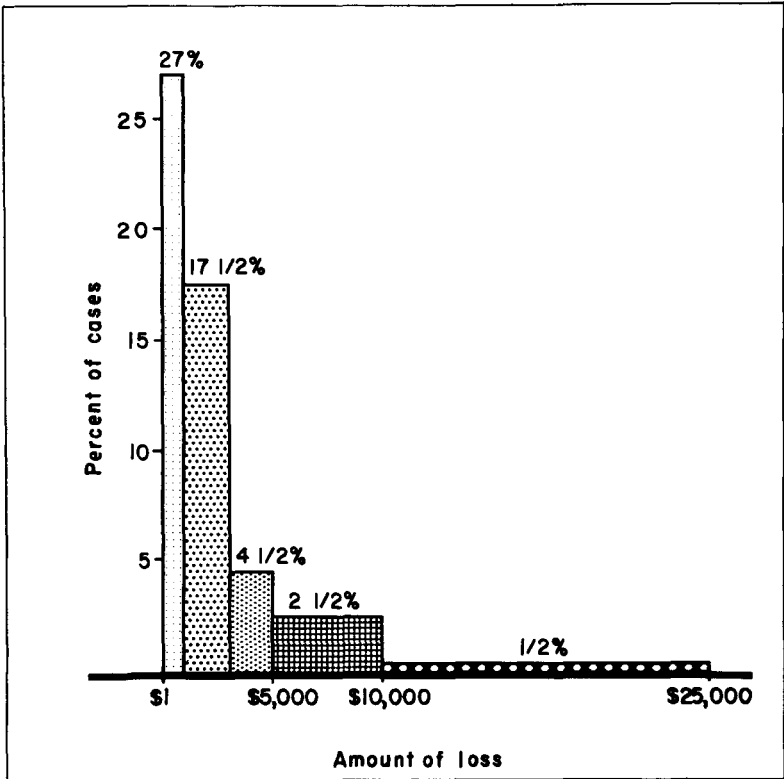
Total expenses incurred		\$1,624
Medical expense	\$ 120	
Property loss	1,504	
	<hr/>	
Income loss		130
Miscellaneous		10
Total economic loss		<hr/> \$1,764

Dottie Douglas was a girl of 6 who was hit by a car, breaking a leg and an arm, dislocating her shoulder, damaging a kidney, and causing a brain concussion. More than a thousand dollars in medical expense was spent on her, and she is expected to recover completely. The calculation for her was:

Medical expense	\$1,133
Total economic loss	<hr/> \$1,133

It should be evident from what has been said that the measures of loss which have been applied in the survey are not necessarily the ones which a jury would or should apply. The subject of the

FIGURE 5-6—AMOUNT OF ECONOMIC LOSS PER CASE
(Percentage distribution of serious cases among \$1000 brackets)



present study is the *economics* of injury reparation, not the *law* of injury reparation, nor the ways in which the law is applied.

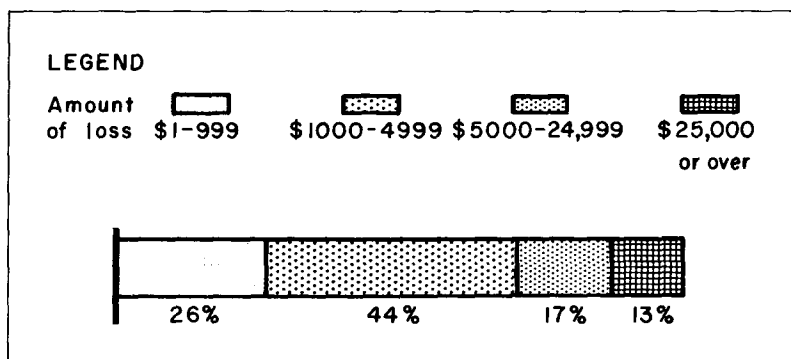
3. Amounts of Economic Loss Sustained in Individual Cases

In order to present a general view of the magnitudes of losses sustained, they have been classified by brackets. Despite the fact that a great number of minor injuries have been excluded, the concentration of "serious" cases is still at the low end. If they were sorted out in brackets of \$1000 each (\$1-999, \$1000-1999, \$2000-2999, etc.) one would find the concentration fifty times as great in the lowest bracket as in the brackets between ten and

twenty-five thousand. The frequency distribution is shown in Figure 5-6.

It will be more convenient for analysis, however, to adopt a simpler form of presentation in which groups may be thought of as involving small losses (\$1-999), medium losses (\$1000-4999), large losses (\$5000-24,999) and very large losses (\$25,000 or more). From this distribution, it may be seen that more than a fourth of the "seriously injured" persons had economic loss of less than \$1000, and over two-thirds of less than \$5000.

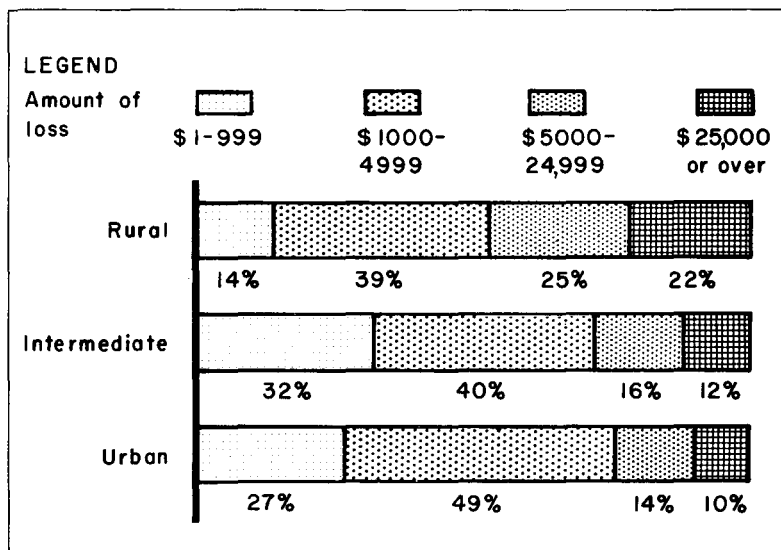
FIGURE 5-7—AMOUNT OF ECONOMIC LOSS PER CASE
(Percentage distribution of persons seriously injured)



The distribution of losses is not the same in rural as in urban areas, although both kinds of areas have the largest concentration of losses in the "medium" bracket (\$1000 to \$4999). In urban communities, the proportion of losses in the lower brackets is noticeably greater; in rural areas, a greater proportion of the losses are relatively large. This presumably results from the fact evidenced in many ways—that a large proportion of the accidents in large cities occur at low speed, and involve relatively minor harm; in rural areas, the proportion of accidents involving death or severe injury is greater. It is also likely that the difference results in part from the tendency to omit reporting of less serious injuries in rural areas (Figure 5-8).

Amounts of economic loss are also correlated with employment

FIGURE 5-8—AMOUNT OF ECONOMIC LOSS PER CASE
IN URBAN AND RURAL AREAS
(Percentage distribution of persons seriously injured)



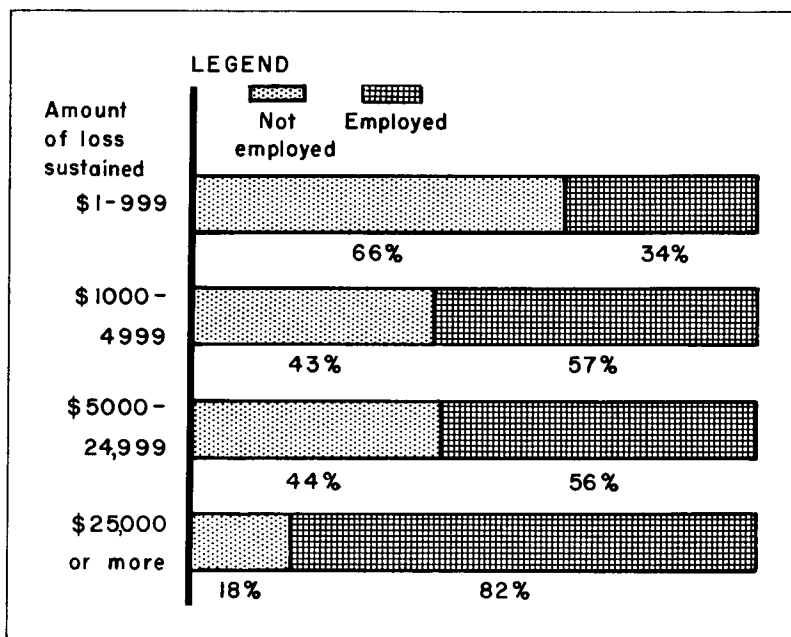
status. Since psychic losses were excluded, and conservative valuations were placed on household work, large economic losses could appear only in the cases of persons gainfully employed, or of young persons with prospects of employment. Among those whose injuries occasioned losses of \$25,000 or more, about four-fifths were found to be employed persons, while only a fifth were not employed. On the other hand, among the small losers (that is, under \$1000), two-thirds were not employed, and only one-third were employed (Figure 5-9).

D. REPARATION FOR SERIOUS INJURIES

1. Sources of Reparation

When an automobile accident victim thinks about how he is going to recover his losses, he probably thinks chiefly (unlike a man disabled by illness or old age) of someone who should pay

FIGURE 5-9—EMPLOYMENT STATUS OF PERSONS SUSTAINING VARYING AMOUNTS OF ECONOMIC LOSS
(Percentage distribution of persons seriously injured)



for having "caused" the loss. If so, the Michigan survey indicates that he thinks wisely. The largest single source of reparation is "tort liability."

But it is not the only one, nor the only important one. For the survivors of a fatality victim, life insurance plays an equally important role (at least in aggregate amounts). In the great majority of cases, the injured person's own medical insurance plays an important role, and directly pays the medical bills for many more people than do tort settlements.

For purposes of analysis, this report records reparation from various sources under these headings:

Based on tort law

Total (whether from liability insurance or from driver's or owner's own resources)

TABLE 5-2
Net Reparation From Various Sources
 (Number of persons, mean and aggregate amounts, and percentage
 distribution in serious injury cases)

	Tort Lia- bility (insured and uninsured)	Injured Person's Own In- surance	Other Sources (employer, social security, etc.)	Expected Future Compen- sation	Total
Weighted number of cases	5675	7340	3445	824	9686*
Mean amount of total reparation (excluding cases of no reparation)	\$4111	\$1848	\$1824	\$8589	\$5188*
Mean amount of reparation (all cases)	\$2269	\$1319	\$611	\$688	\$4887
Aggregate amount of reparation	\$23,332,500	\$13,560,750	\$6,283,750	\$7,077,000	\$50,254,000
Percent of aggregate for each source	46%	27%	13%	14%	100%

* These totals are not equal to the sum of the components, since some persons received reparation from more than one source, but not all received reparation from all sources.

Based on the injury victim's own insurance

Total from medical, life, burial, accident, and other insurance, less amounts received elsewhere which had to be paid over to insurance company

Miscellaneous

From employers (chiefly sick leave)

From workmen's compensation

From social security (disability benefits or survivors' benefits)

Future compensation

Chiefly future payments under annuities or pensions arising from insurance policies or social security.

Table 5-2 shows how reparation from the various sources contributed to the total number of persons receiving reparation, and the total amount of reparation received.

A pair of cases may be summarized to illustrate how different sources of reparation affected particular individuals.

Multiple sources of reparation were prominent in the case of Ed Evans, who was killed instantly in an automobile collision. The guilty driver's insurance company paid \$90,000, but this had to be shared equally among the survivors of three men who were killed. After deducting an attorney's fee, Ed's family got \$22,500. From private life and medical insurance, the family received \$4336 in immediate cash. Social security payments to the date of the interview had amounted to about \$3500. The discounted present value of future payments from annuity features of the life insurance contract, and from social security payments, were estimated at \$63,000.

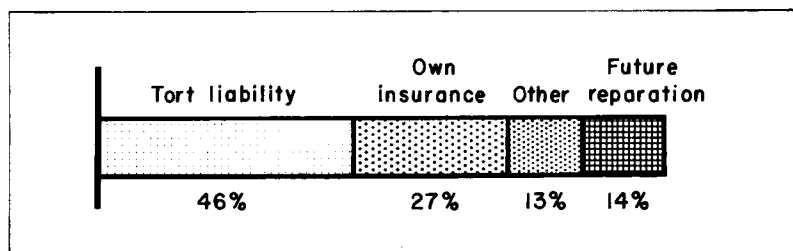
An unusual source of reparation appeared in the case of Freddy Foote, a boy of 18 who received a spinal injury condemning him to a wheel chair for the rest of his life. The responsible driver's insurer paid \$10,000 (of which \$6000 was net to Freddy), and an association for the aid of crippled children contributed \$5500 to Freddy's medical treatment.

One important source of reparation was noted with respect to a number of cases, but no attempt was made to estimate its amount. This was free medical care, dispensed by the Veterans' Adminis-

tration, municipal hospitals, and other agencies. Closely allied to it are subsidies for medical care, which result in an understatement of its true cost. The amounts of reparation recorded in this report relate only to money which was paid on account of the injury to the injured person, or to his creditors; they do not include free services or subsidization of service.

In the aggregate, settlements for tort liability were much the largest component in the aggregate total reparation picture for serious automobile injury victims. This source comprised about 46 percent of the aggregate dollars received for these accidents. The second main group of identified reparation payments came from private loss insurance, of which life insurance, hospital-medical, and automobile insurance were the principal components. These contributed 27 percent of the aggregate total reported. The third main element was future compensation expected, chiefly in the form of death and disability benefits under the federal Old Age, Survivors, and Disability Insurance (OASDI). Reported amounts came to 14 percent, but reports were probably quite incomplete on this subject.

FIGURE 5-10—SOURCES OF AGGREGATE REPARATION
(Percentage distribution of aggregate amounts of reparation from various sources in serious injury cases)



It is probable that a similar distribution made thirty years ago would have shown a much greater predominance of tort settlements. Social security survivors' benefits, which form a large part of "future payments," did not even exist. Hospital and medical

insurance—a large component of the “private loss insurance” factor—was very little known.

The evolution has not ceased, and a survey of reparation for 1963 injuries would probably show a significant departure from these results for 1958 and earlier injuries. The disability benefits aspect of the social security program has developed largely since 1958, and would be likely to apply specifically to many of the subjects of this survey. Therefore the “future payments” elements would probably be substantially larger in a survey of injuries incurred in the 1960's.

2. *Comparing Reparation with Loss*

A prime objective of the present study was to determine net effects of injuries, after reparation, on economic welfare of the injury victims. For this purpose, it was important to compare the net reparation in individual cases with losses in the same cases. In each serious injury case, a ratio was calculated by dividing the amount of net reparation by the amount of economic loss.

These ratios must be presented with several warnings against misinterpretation. Neither the measurements of loss nor those of reparation are highly exact. When large amounts of future income are involved there is ample room for difference of opinion as to how much would have been earned if the injury had not occurred; there is also room for difference of opinion as to how much reparation is likely to be received in the future from Old Age, Survivors, and Disability Insurance, and other sources. The ratios in individual cases cannot be regarded as expressing a highly exact relation.

With respect to reparation which substantially exceeds loss, a further warning should be given. If net reparation is 200 percent of loss, it does not necessarily follow that too much has been paid. In most cases, reparation comes from many sources, and there is no law or legal principle which limits cumulative reparation to the actual loss. On the contrary, the law clearly considers that insur-

ance payments (both private and social) should be made even if a tort settlement for the entire loss is about to be paid. The law also considers that a tort settlement should be paid for the entire loss even though substantial amounts have been or will be received from private or social insurance.

There is another reason why ratios of reparation to loss of over 100 percent do not necessarily indicate "overcompensation." According to legal theory, the tort settlement should include not only the economic loss, but also the psychic. Since the directors of the survey know of no standard for measuring psychic loss, it has seemed best to record only the ratio of reparation to economic loss, and to let readers draw their own conclusions about the ratio of net reparation to economic-plus-psychic loss.

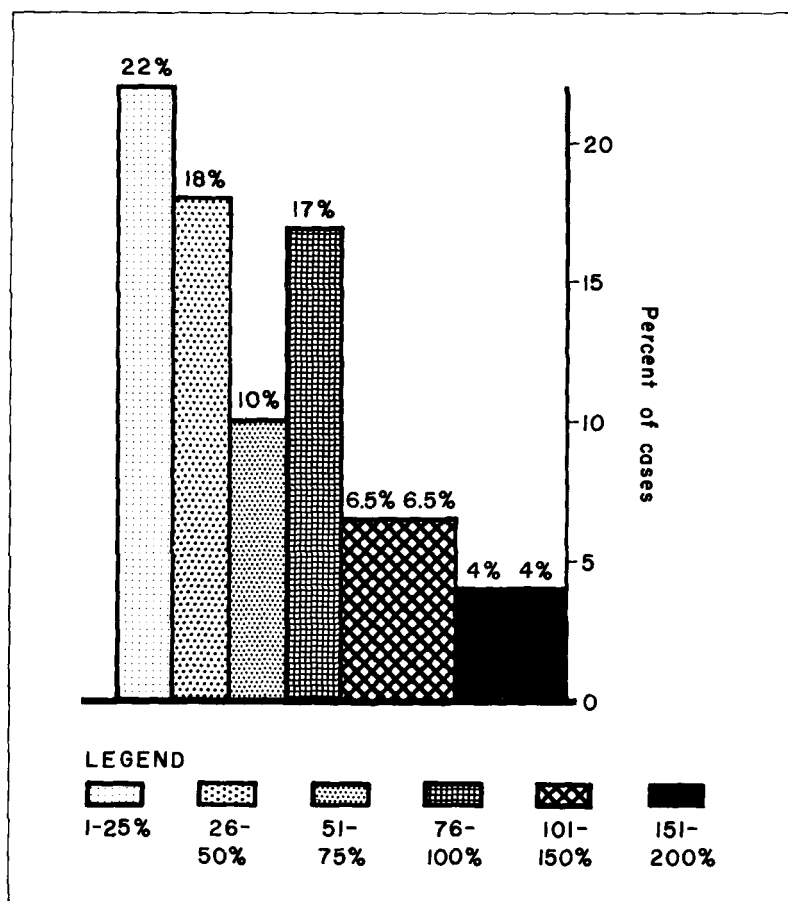
Furthermore, the presence of a reparation loss ratio of substantially over 100 percent does not mean that there has not been and will not be economic distress. If a tort settlement produced a major part of the reparation, there may have been great financial stringency while the settlement was awaited. The survey showed that many injury victims suffer deprivations pending settlement. Once the settlement is received it may be improvidently invested, so that the injury victim or his family will again suffer economic distress.

The meaning of a reparation-to-loss ratio of over 150 percent is simply this: that the economic benefits received by the victim or his family were substantially greater than their economic loss.

The cases in which net reparation is substantially *less* than loss probably merit a good deal more attention than those in which it appears to be substantially more. In these cases, there can be little doubt that the economic status of the injured person and his family have been materially impaired. But here too some warnings must be given. Undercompensation does not mean that "justice" has miscarried. The law provides and intends that injury victims should be less than fully compensated when they have been negligent themselves, or when injuries have occurred through no one's negligence.

Furthermore, even if there is a guilty defendant, undercompensation of the victim does not prove that the defendant has not paid his due. If the injury victim has received only 67 percent of his loss, it is quite possible that the defendant has paid 100 percent of it, the difference being the expenses incurred by the injured person in collecting his claim.

FIGURE 5-11—NET REPARATION AS A PERCENT OF ECONOMIC LOSS
(Percentage distribution of cases per 25% bracket;
serious injury cases in which some reparation was received)

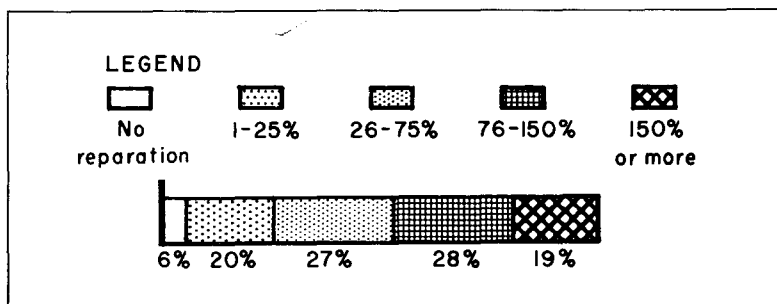


3. Ratios of Net Reparation to Loss

Ratios of net reparation to loss, like nearly every other quantity examined, are clustered at the low end. There are many more cases where the ratio is under 25 percent than where it is between 26 and 50. There are more cases where it is between 101 and 150 percent than between 151 and 200 percent. But there is one bump in the sharp downward slope; ratios between 76 and 100 percent are more frequent than in the brackets on either side (Figure 5-11).

But the pattern of the ratios can be more easily grasped if the cases of no reparation are included, and the ratio brackets are reduced to four, as in Figure 5-12.

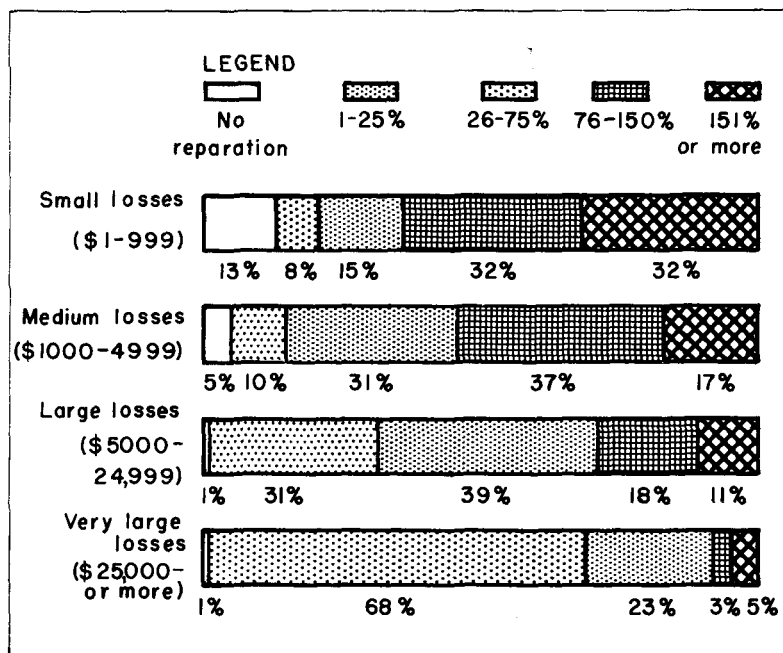
FIGURE 5-12—NET REPARATION AS A PERCENT OF ECONOMIC LOSS
(Percentage distribution of serious injury cases)



From this presentation it is quickly seen that a fourth of the injured persons received net reparation in the 76 to 150 percent bracket, which might be regarded as signifying full economic compensation, within a reasonable margin for error. Only about a fifth received substantially more than their economic losses, while more than half received substantially less, or nothing at all. These figures represent reparation not only from tort settlements, but from all sources, including their own insurance.

Although this distribution of reparation-to-loss ratios is interesting, the pattern becomes much more instructive when the cases

FIGURE 5-13—NET REPARATION AS A PERCENT OF ECONOMIC LOSS
FOR LOSSES OF VARYING AMOUNTS
(Percentage distribution of serious injury cases)



are separated into groups involving economic losses of different magnitudes. When the economic loss was under \$1000, the chances were quite good that it would be paid for with something left over for psychic loss. But when the loss was a crushing one—over \$10,000, for instance—it was very rare that the reparation even came close to matching economic loss. Two-thirds of the persons with such severe losses received less than a quarter of their economic losses, with no consideration of psychic losses (Figure 5-13).

This contrast is all the more striking when one reflects that the psychic losses are probably greatest in the cases of death and permanent total disability, which produce the large economic losses.

The reasons for the wide variance in ratios of reparation would have to be pursued, if pursuit were possible, separately for each source. The factors which lead to unequal coverage of life insurance are probably quite different from those which lead to unequal recovery on tort claims. The further pursuit of these reasons has been attempted by the present study only in relation to settlement of tort claims. That is the subject of the next two chapters.

CHAPTER 6

Tort Settlements In the Serious Injury Cases

For the victims of serious automobile injuries, tort liability was the most important single source of reparation. It accounted for nearly half of the total reparation received and expected (Table 5-2 *supra*).

The settlements were of all sizes, and in all kinds of circumstances. In some cases there was little if any reason to believe that a particular driver was liable; but he or his insurer saw fit to pay a "nuisance settlement" rather than dispute a claim. At the other extreme, some were found guilty by juries, and paid under the threat of legal compulsion. From one extreme to the other, the payments are called "settlements" because they represent amounts that one party agreed to pay the other, whether under a slight or a great degree of duress. Some of the variations in sizes and circumstances are detailed in this chapter.

A comprehensive view of the numbers of tort settlements received in various amounts, and at various stages of litigation, is presented in Table 6-1. Particular lessons of interest in regard to tort settlements will be more fully explained in the present chapter.

A. STAGES OF CLAIM AND LITIGATION

Although popular descriptions of the process of tort settlement often indicate that such claims must be collected by hiring lawyers and going to court, this is far from a valid generalization. Tort claims, like claims for life insurance payments and for social security payments may be and often are paid directly to the claimant without a lawyer and without a suit, much less a trial. Only if

TABLE 6-1
 Amounts of Tort Settlement
 distributed by
 Stage of Claim or Litigation Reached
 (estimated numbers of serious injury cases)

Amounts of settlements	All cases		Lawyer hired			Trial began
	No lawyer hired	No suit filed	Suit filed		Pretrial	
			No pretrial	Pretrial		
Total receiving settlements	5,675	1,641	1,286	624	369	
\$1-999	1,619	425	129	53	57	
\$1000-2999	2,090	753	368	265	149	
\$3000-9999	1,496	310	569	275	162	
\$10,000 or more	470	153	220	31	1	
Total not receiving settlements	4,607	684	199	112	132	
Total	10,282	5,235	1,485	736	501	
Aggregate settlements	\$20,662,900	\$2,917,320	\$8,966,057	\$2,310,732	\$1,203,841	
Mean for those receiving settlements	\$3,738	\$1,662	\$3,280	\$3,858	\$3,382	
Mean for all cases	\$2,066	\$557	\$6,642	3,349	\$2,518	
Number of interviews ¹	320	156	72	46	29	

¹ The number of interviews forming the basis of information in various tables and figures varies because some interviews did not furnish information on all points.

the defendant refuses to pay the amount which the claimant demands, is it necessary for the claimant to hire a lawyer, or file suit. And these steps may also be necessary if a life insurance company, or the Social Security Administration, refuses to pay. The relevant difference between tort liability and most other sources of reparation lies in the frequency of disagreement, and the consequent frequency of litigation.

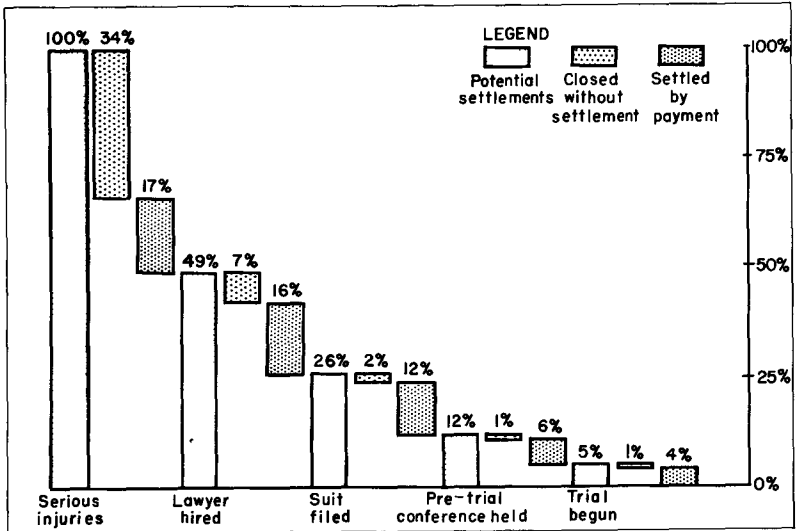
The extent of litigation was carefully studied in connection with the approximately 10,300 persons who suffered serious injuries in Michigan automobile accidents in 1958. Some of these persons made no attempt to collect any damages. Others tried to collect, but were unsuccessful, and they gave up without putting their cases in the hands of a lawyer (for their reasons, see Table 6-3, *infra*). The total of the two groups who thus "dropped" their claims without settlement was about 34 percent of the seriously injured individuals. Others were more fortunate; they received tort settlements without having to hire lawyers; about 17 percent were in this group, leaving 49 percent of the cases to be handled by lawyers. Very few of these lawyer-represented cases were dropped without suing or collecting, but about a third of them (16 percent of the serious cases) got settlements without having to file suit. This left 26 percent of the serious injury cases in which suits were filed for personal injuries.

Of those who filed suits, nearly half (12 percent of the cases) obtained settlements without going to trial or a pretrial conference. Of those cases which went to pretrial conference, about half were settled without going to trial.

Figure 6-1 indicates the pattern of disposition of injury cases at various stages of claim and of litigation.

Although the *number* of cases settled is less at each successive stage of litigation, the same cannot be said of the *amounts*. Of the settlements made without lawyers, a very small percentage are over \$3000; of the settlements made by lawyers after suit filed, a majority are over \$3000. However, the amount of settlement

FIGURE 6-1—DISPOSITION OF CASES AT VARIOUS STAGES OF CLAIM AND LITIGATION
(Percentage distribution of serious injury cases)

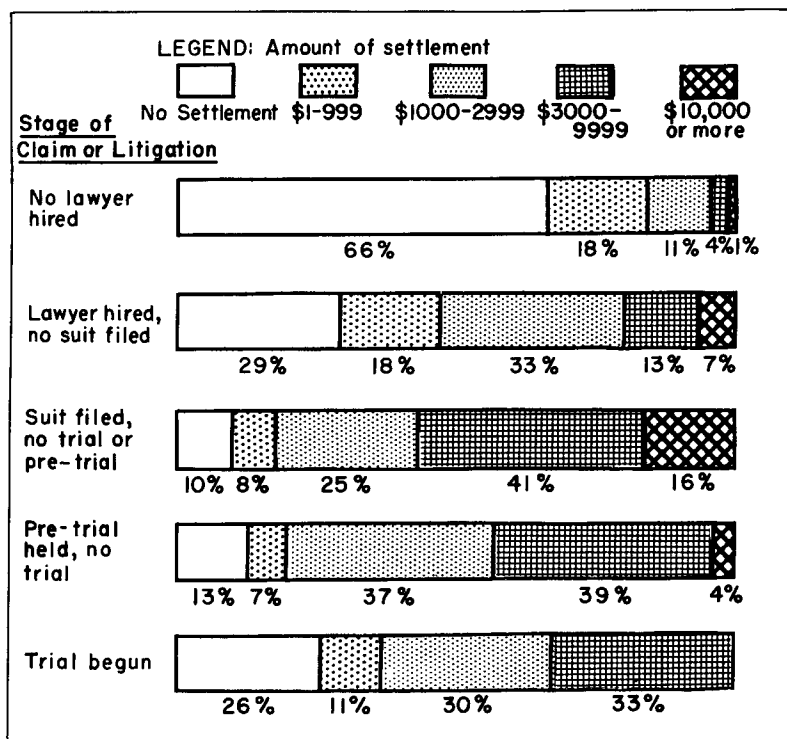


Number of interviews providing this information: 312.

does not rise at each successive stage; there are proportionately more small settlements after pretrial than between suit and pretrial; there are proportionately more small settlements after trial than between pretrial and trial. It appears that the defense pays off most of the big winners before getting to the pretrial conference, and goes to pretrial and trial chiefly in cases where there are means of defeating or holding down the recovery. The distribution of settlements at the various stages is shown in Figure 6-2.

Because they usually settled for smaller amounts, the 31 percent of claimants who settled without a lawyer received only 15 percent of the aggregate amount of settlements. In contrast, the 23 percent who settled after filing suit but before trial or pretrial got 43 percent of the aggregate settlements because many of their settlement amounts were quite large. The distribution

FIGURE 6-2—AMOUNTS OF TORT SETTLEMENTS MADE AT SUCCESSIVE STAGES OF CLAIM AND LITIGATION
(Percentage distribution of serious injury cases)



Number of interviews providing this information: 155, 71, 42, 28, 16.

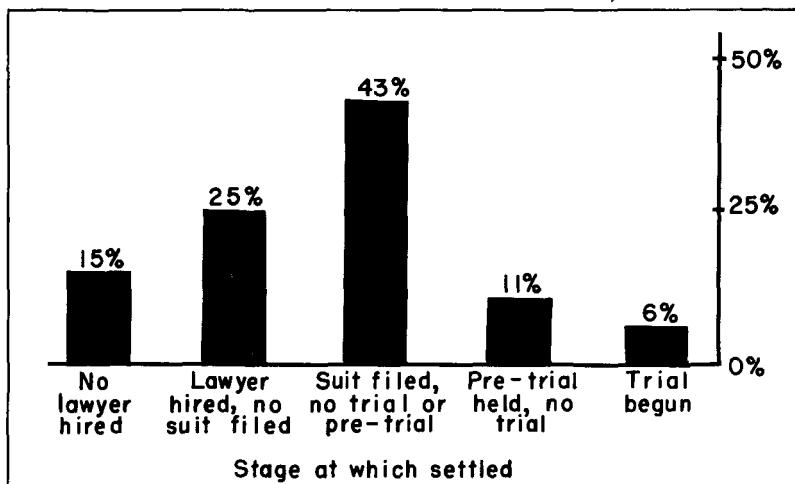
of aggregate settlements among the successive stages of claim and litigation is shown in Figure 6-3.

B. GROSS TORT SETTLEMENTS

The "gross settlement" is the amount paid out by anyone, usually a liability insurance company, to settle the insured's potential liability for negligence. Even in serious cases, most of the settlements are relatively small, and the frequency of occurrence falls off rapidly as the amount rises. Figure 6-4 illustrates this relationship.

This distribution gains more significance when it is reduced to

FIGURE 6-3—AGGREGATE TORT SETTLEMENTS AT SUCCESSIVE STAGES OF CLAIM AND LITIGATION
(Percentage distribution of estimated aggregate amounts in serious injury cases in which a settlement was obtained)

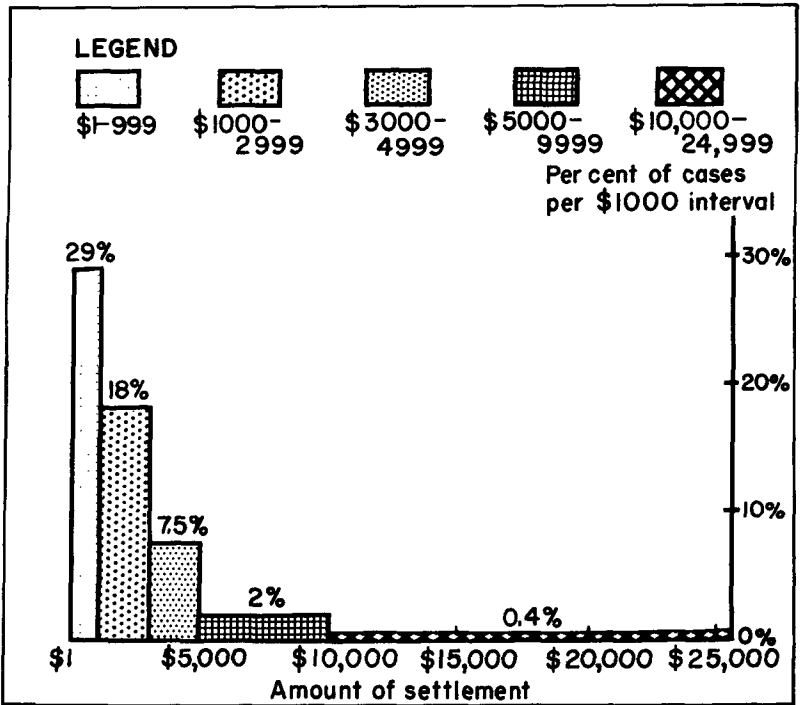


Number of interviews providing this information: 320.

a smaller number of categories, and compared with the distribution of losses among the same subjects of injury. Although all of the serious injury victims had some economic loss, 45 percent of them obtained no tort settlement at all. To put it the other way around, 100 percent had a loss, but 55 percent received a tort settlement. Twenty-six percent of the serious injury victims had losses between one and a thousand dollars, but only 16 percent of the same group had settlements in this range. The disparity mounts as the amounts rise, so that 20 percent with losses over \$10,000 compare with 5 percent receiving settlements over this figure. This comparison is graphed in Figure 6-5.

The disparity between amounts of loss and of settlements does not mean that tort law is not doing the job for which it is designed—the compensation of the innocent by the guilty. Indeed, the fact that 45 percent of the injured receive no settlement might be taken to show that the tort law is working as it should in making recovery depend on negligence and freedom from contribu-

FIGURE 6-4—FREQUENCY OF SETTLEMENTS OF VARIOUS AMOUNTS
(Percentage distribution of serious injury cases in which a settlement was obtained)

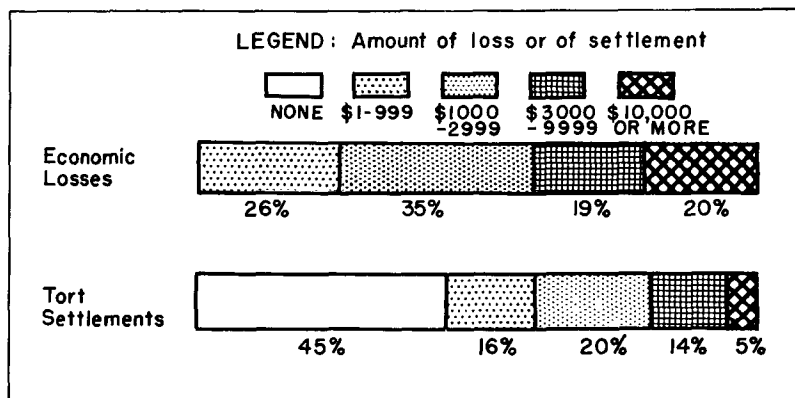


Number of interview providing this information: 183.

tory negligence. Viewing the matter from this point of view, one might wish to compare the percentage distributions of losses and settlements, with uncompensated cases excluded. On this basis of comparison, one finds a striking similarity between the two distributions. The only glaring dissimilarity appears in the bracket of "\$10,000 or more," in which the proportion of settlements is significantly lower than the proportion of economic losses. The comparison is made in Figure 6-6.

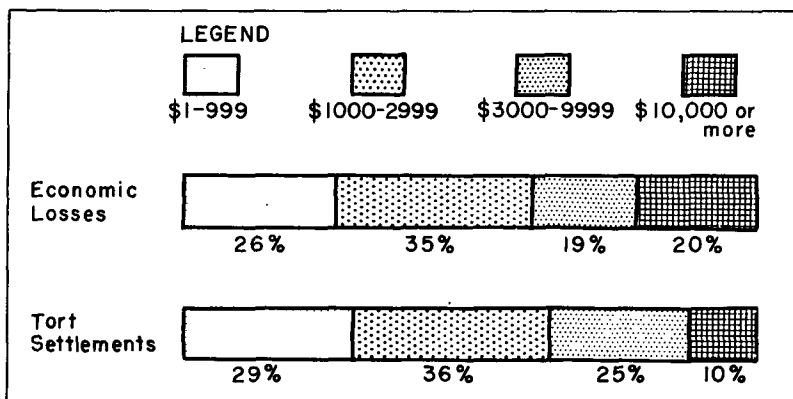
Perhaps the most striking aspect of these distributions is the large proportion of injured persons who receive settlements which must be far below anyone's estimate of their actual loss. Tort

FIGURE 6-5—COMPARISON OF AMOUNTS OF ECONOMIC LOSSES AND OF TORT SETTLEMENTS
(Percentage distribution of serious injury cases)



Number of interviews providing this information: 310, 312.

FIGURE 6-6—COMPARISON OF AMOUNTS OF ECONOMIC LOSS AND OF TORT SETTLEMENTS IN SETTLED CASES
(Percentage distribution of serious injury cases)



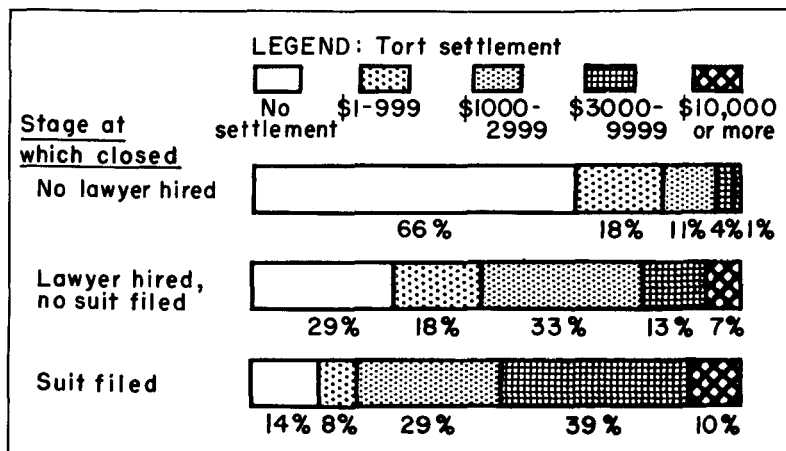
Number of interviews providing this information: 310, 183.

theory, which calls for the recovery of all or nothing, offers no justification for this phenomenon. Presumably it results partly from the desire of parties to compromise rather than to gamble for the all-or-nothing result of a jury verdict and partly from the expectation that a jury would also compromise to reach agreement

between those who want to give all and those who want to give nothing. This hypothesis is supported by the examination, in Section H of this chapter, of factors which augment or limit the amounts of settlements.

The frequency of obtaining a settlement, and the size of the settlement received, varied greatly in relation to the steps taken to obtain a settlement. Of seriously injured persons who did not hire a lawyer, only about a third obtained a settlement; of those who hired a lawyer but did not file suit, more than two-thirds obtained settlements; and of those who filed suit, over five-sixths obtained settlements (Figure 6-7).

FIGURE 6-7—AMOUNTS OF TORT SETTLEMENTS MADE AT SUCCESSIVE STAGES OF CLAIM AND LITIGATION (Percentage distribution of serious injury cases)



Number of interviews providing this information: 155, 71, 86.

However, after suit was filed, further stages of litigation were not accompanied by higher frequencies or higher amounts of settlement. To the extent that conclusions can be drawn from the diminishing number of cases at each stage, claimants were less likely to obtain a favorable settlement after pretrial conference than before, and still less likely after trial (see Table 6-1).

The correlations between litigation and settlement obviously do not establish a causal relation. The fact that more favorable settlements are obtained in lawyer-represented cases might be attributed either to the skill of lawyers in obtaining settlements, or to the disposition of clients to hire lawyers only in hopeful cases, or to some combination of the two.

C. COLLECTION EXPENSES

For most injury victims, the amount of the tort settlement was not a net benefit; it was obtained at the cost of lawyers' charges, lost work time, and transportation costs. The major portion of lawyers' charges was usually fees for professional services, but often included court filing fees, photographers' and stenographers' fees, and other elements. Most claimants had very little idea of the composition of lawyers' charges, and the survey was not able to obtain such details from claimants' lawyers in all cases. Therefore, "collection expenses" were taken as a gross amount comprising out-of-pocket expenses of the claimant and his lawyer, as well as compensation for the lawyer's professional services.

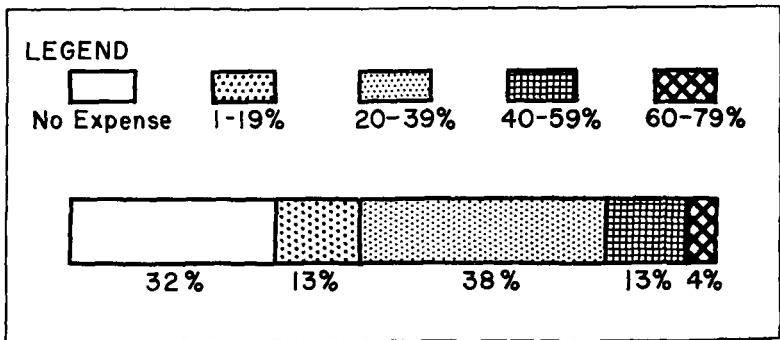
The interesting aspect of collection expense is not primarily its dollar amount, but its relation to the amounts of gross settlement. What people want to know is, do the collection expenses eat up most of the settlement, or do they only nibble at the fringe? To answer this question, cases of tort settlements have been classified in the following categories:

- No collection expense
- Collection expense from 1 to 19% of tort settlement
- Collection expense from 20 to 39% of tort settlement
- Collection expense from 40 to 59% of tort settlement
- Collection expense of 60% or more of tort settlement

It may surprise some readers to discover that 32 percent of those who collected settlements did so without incurring any collection expense. On the other hand, it will surprise no one that when collection expense was incurred, it was usually in the 20 to

39 percent bracket; the mean was 32 percent. It may be more surprising that large blocks of claimants fell outside of these limits, with some reporting expenses equaling more than 60 percent of the settlement. The distribution is indicated in Figure 6-8.

FIGURE 6-8—COLLECTION EXPENSE AS A PERCENT OF SETTLEMENT
(Percentage distribution of serious cases in which a settlement was received)



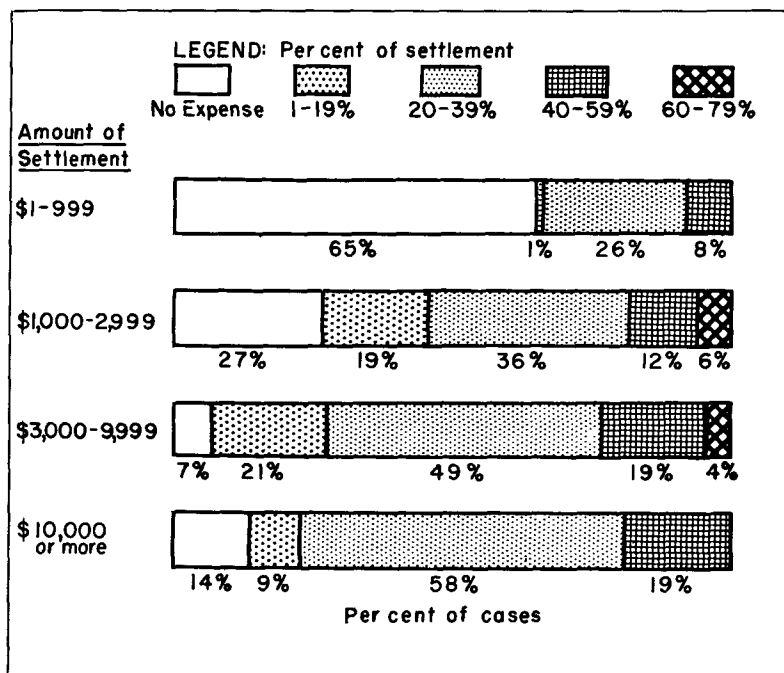
Number of interviews providing this information: 165.

Collection expense did not appear to vary significantly between urban and rural areas, nor with other differences in the character of claimants, but it varied very significantly with the amount of the settlement. Among the smaller settlements, almost two-thirds were obtained with no collection expense at all; among the larger settlements, only about a tenth were obtained without expense. The distribution of collection expense rates among settlements of different sizes is shown in Figure 6-9.

The main factor in determining whether there would be any collection expense, and how much, was whether or not a lawyer was hired. Of the claimants who received a settlement without hiring a lawyer, 92 percent had no collection expense; of those who hired a lawyer, only 3 percent escaped collection expense (Figure 6-10).

Among claimants who hired lawyers, the distributions of collection expense varied less. But the proportion incurring a high

FIGURE 6-9—COLLECTION EXPENSE AS A PERCENT OF SETTLEMENT
FOR SETTLEMENTS OF VARYING AMOUNTS
(Percentage distribution of serious injury cases)



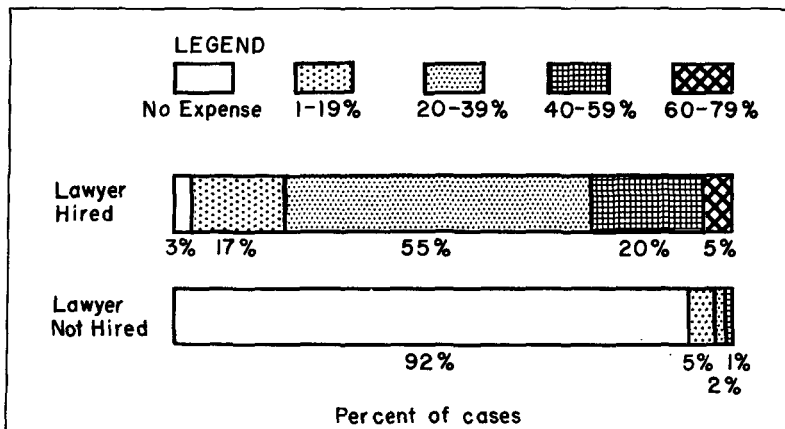
Number of interviews providing this information: 43, 57, 51, 14.

rate of expense was significantly greater for those whose lawyers filed suit than for those who settled without it; and it was greater for those who went to trial than for those who settled before trial (Figure 6-11).

D. RATIOS OF SETTLEMENTS TO LOSS

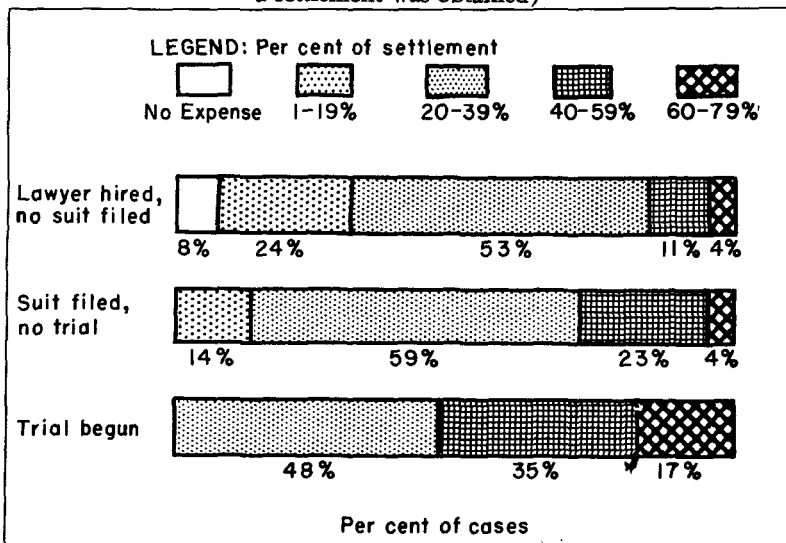
One main objective of the present study has been to determine to what extent injury victims are economically impaired or enriched by the scarcity or abundance of reparation. Since tort settlements are the largest component of reparation, it is interesting to see what part the tort settlements play in this impairment and enrichment.

FIGURE 6-10—COLLECTION EXPENSE AS A PERCENT OF TORT SETTLEMENT WITH AND WITHOUT A LAWYER
(Percentage distribution of serious injury cases in which a settlement was obtained)



Number of interviews providing this information: 47, 118.

FIGURE 6-11—COLLECTION EXPENSE AS A PERCENT OF TORT SETTLEMENT AT SUCCESSIVE STAGES OF LITIGATION
(Percentage distribution of serious injury cases in which a settlement was obtained)



Number of interviews providing this information: 46, 60, 12.

From this point of view, the *net* settlement—rather than the *gross* settlement—is the significant sum for comparison. This was derived in each case by deducting the collection expense from the tort settlement—relying on claimants' reports of both amounts.

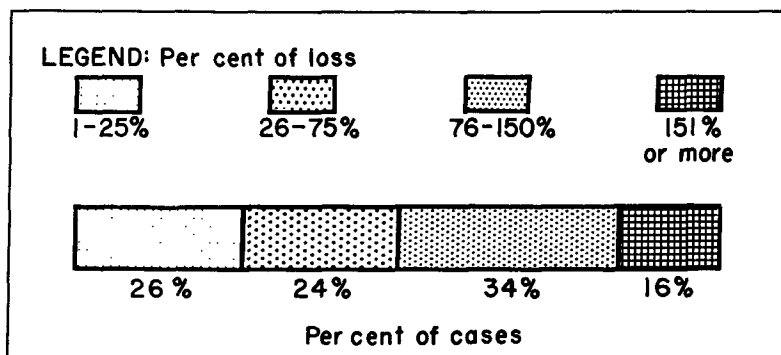
From some other points of view, the *gross* settlement might be more interesting. Since tort law specifies what the defendant must pay, rather than what the plaintiff must get out of it, a comparison of gross settlements with losses would doubtless be interesting to tort theorists. However, in order to measure to what extent the tort law is doing its appointed job, one would have to include amounts of *psychic*, as well as economic loss. In the absence of any method of measuring these losses, a study of the ratios of gross settlements to losses might be more misleading than enlightening. Therefore the study does not present ratios of gross settlements to economic losses.

When all serious cases are viewed together there is no striking pattern in the distribution of ratios. It looks as though the amounts of settlement were a random choice, or at least completely unrelated to amount of economic loss. Despite the breadth of the bracket for settlements approximating loss (76 to 150 percent), only 34 percent of the cases fell within this bracket. Twenty-four percent fell in the narrower bracket from 26 to 75 percent. And there are substantial proportions in the exterior brackets—under 26 percent, and over 150 percent (Figure 6-12).

When the settlements are divided into classes according to amount, a more definite pattern appears (Figure 6-13). A very large proportion of the settlements which were small in amount were also small in proportion to the amount of loss which the injured person had sustained. It will be recalled that a large proportion of these small settlements were made directly with the injured person, unrepresented by counsel (Figures 6-9, 6-10, *supra*).

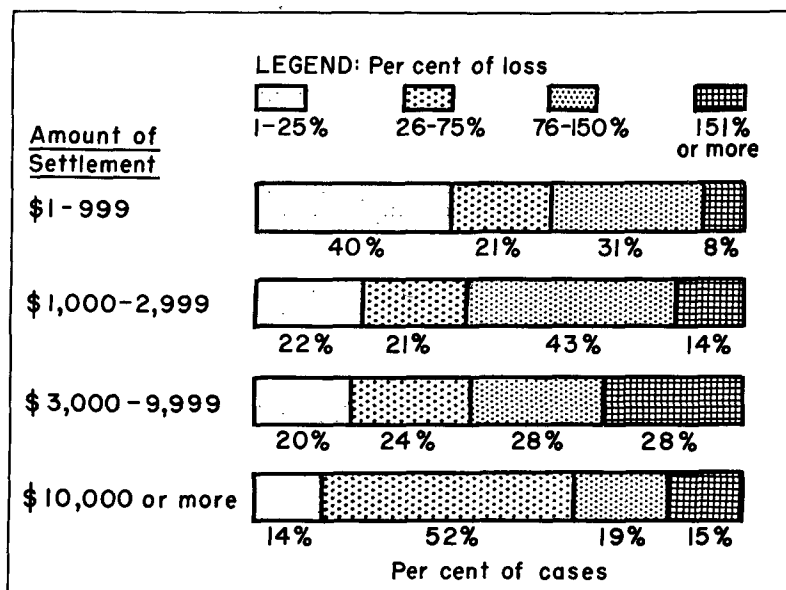
In the next higher range of settlements, the ratios were much better; the modal group was in the neighborhood of 100 percent

FIGURE 6-12—NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS
(Percentage distribution of serious injury cases in which a settlement was obtained)



Number of interviews providing this information: 159.

FIGURE 6-13—NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS FOR SETTLEMENT OF VARYING AMOUNTS
(Percentage distribution of serious injury cases in which a settlement was obtained)



Number of interviews providing this information: 41, 55, 49, 14.

of economic loss. In settlements between \$3000 and \$10,000, settlements were still more generous; more than a quarter of them were far above economic loss. But the settlements of over \$10,000, though large in amount, were generally modest when viewed in relation to losses; two-thirds of them were less than 75 percent of estimated economic loss.

The differentiation among ratios of settlement to loss is even more accentuated when the cases are classified by the amount of *economic loss sustained* (Figure 6-14), instead of the amount of *reparation received* (as in the preceding figure). Among the cases of small loss, the largest settlement bracket was from 76 to 150 percent; a sizable fraction of the cases received over 150 percent of economic loss. The cases of large losses stood at the other extreme. Most of them got less than 25 percent of their economic loss, and none passed 75 percent. The smaller the loss, the higher the percent of settlement; the larger the loss, the smaller the percent of settlement.

Although low rates of settlement were more frequent in the large loss cases, instances of no settlement at all did not seem to vary according to any consistent pattern. There were 45 percent of no-settlement cases among the losses of under \$1000, 43 percent among losses of \$1,000 to \$4,999, 32 percent among losses of \$5000 to \$24,999, and 53 percent among losses of \$25,000 or more.

E. MEANING OF THE RATIOS OF SETTLEMENT TO LOSS

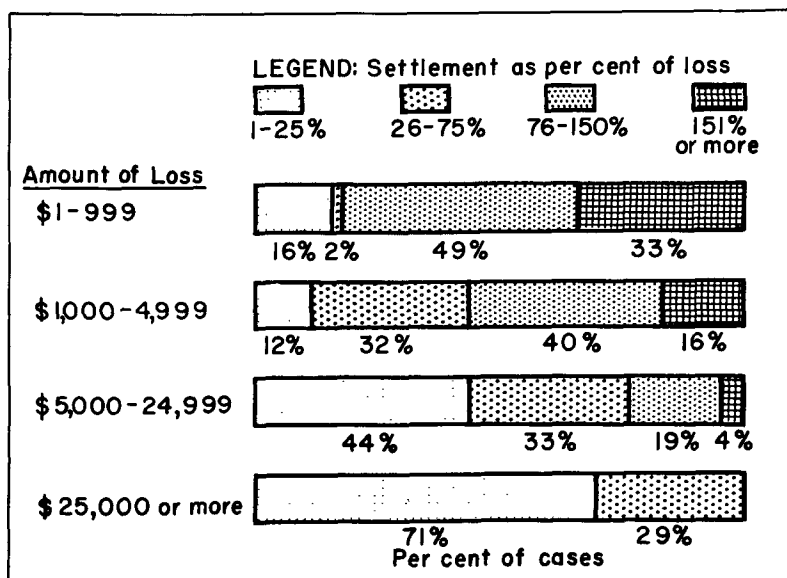
Ratios are capsules of analysis which condense a great deal of information, and which for this very reason demand some care in their interpretation.

Ratios of more than 150 percent may be conveniently thought of as signifying cases of *full economic* compensation plus *substantial psychic* compensation. Whether the psychic compensation is excessive or inadequate is a matter on which each reader will have to make his own estimates, since the survey directors have

not been able to devise any way to help him. It is hardly necessary to say that none of the ratios, however high, can be regarded as signifying "overcompensation" in the absence of a means of measuring psychic loss. Not only does the law command compensation for psychic loss, but questions asked in the course of this survey indicated that a large preponderance of people with injury experience believe in it (see Chapter 8, *infra*).

Ratios of 76 to 150 percent may be regarded as signifying full economic compensation without substantial psychic compensation. Accepting this view, it becomes extremely interesting that when all the serious injury cases were taken together, just half received full economic compensation or more, and half received less (Figure 6-12). It becomes even more interesting that among

FIGURE 6-14—NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS FOR VARYING AMOUNTS OF ECONOMIC LOSS
(Percentage distribution of serious injury cases in which a settlement was obtained)



Number of interviews providing this information: 29, 62, 43, 25.

the largest loss group (from \$25,000 upward) no sampled case got into the full compensation range (Figure 6-14).

Ratios of 75 percent or less may conveniently be thought of as signifying *partial compensation* of economic loss, and no compensation at all for psychic loss. So viewed, these cases become interesting from several points of view.

In order to appreciate the extent of *partial compensation*, one should first recall that the proportions are calculated after laying to one side about half of the serious injuries, in which there was *no compensation* by way of tort settlement. The proportions now being discussed are fractions of the serious cases receiving *some compensation* by way of tort settlement. Over half of this half involves only *partial compensation*.

Among the cases of really severe economic losses (\$25,000 or more), partial compensation is virtually the only kind that occurs; *no* cases of full economic compensation fell within the sample.

This observation is particularly striking in the light of the theory of tort law that an injury victim is entitled to recover his entire loss, including psychic loss, if he is entitled to recover at all. How can one reconcile this theory with the observation that half the people who recover tort settlements get substantially less than their purely economic loss?

In the large loss cases—those over \$25,000, one of the explanations is the limits of insurance policies. Ten thousand dollars per injured person is still a very common limit of liability insurance. There are also cases in which settlements are held down by the lack of any insurance at all.

Another explanation for the deficiency is the fact that many tort settlements are subject to deduction of the fees and expenses of the claimants' attorneys. If the pay-out by the insurance company had been in each case exactly 100 percent of the economic loss as estimated by the survey, and if the claimant's attorney had deducted exactly a third of the settlement, the settlement ratio

would have been $66 \frac{2}{3}$ percent, and would have fallen in the "partial compensation" zone.

But this phenomenon would not explain the large number of cases in the ratio bracket of 1 to 25 percent, nor the cases in which there was no collection expense. It is evident that a great many cases are systematically and consciously settled for substantially less than the economic loss.

In this respect, the statistics confirm what every lawyer and adjuster knows—that questions about negligence, proof, the defendant's ability to pay, and the claimant's desire for an end of litigation, lead to the compromise of claims at levels which correspond to no theory of legal right. Furthermore, the factors tending toward compromise are much more powerful in the cases of large economic loss than they are in the small ones.

F. RATIO OF SETTLEMENT TO EXPENSES INCURRED

The ratio of settlement to economic loss, which has just been examined, has one weakness. It views all elements from the injured person's point of view, taking his estimates of what he earned before he was disabled and of how much he will be able to earn in the future, and measuring the settlement by the amount that he receives after paying his collection expenses.

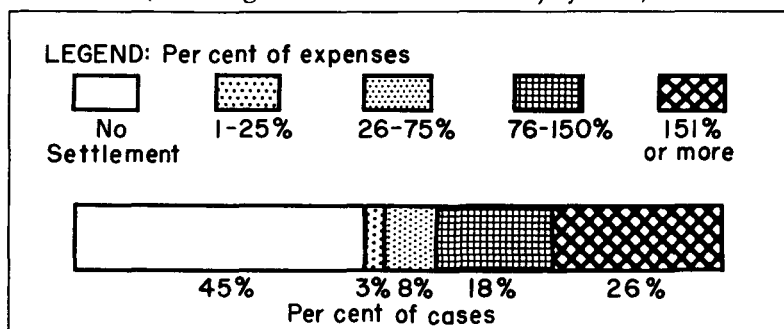
In order to view the matter as it may be seen by putative tortfeasors and their insurers, an additional ratio has been constructed, which compares the settlement with *expenses incurred*. In this ratio, the settlement is not the net amount received by the injured person, but the gross amount paid by the alleged tortfeasor or his insurance company. This amount is then compared with "expenses incurred," which exclude nearly every element about which there could be a wide difference of opinion. "Expenses incurred" include medical and hospital bills (regardless of who, if anyone, paid them), transportation and other expenses caused by the injury, plus the loss in value (if any) caused to the injury

victim's car or other property (regardless of whether or not it was repaired or replaced).

In cases of death or permanent disability the "expenses incurred" figure is often a minute fraction of "economic loss," because of the exclusion of income loss. Hence, the ratio of "settlement to expenses incurred" may be 100 percent although the ratio of "settlement to economic loss" in the same case would be only 5 or 10 percent. On the other hand, the partial disability of a housewife, or the temporary disability of a child, may result in no income loss, and the "expenses incurred" may be exactly the same as the "economic loss." Even so, the ratio shown in this study would be much higher, since the gross settlement instead of the net settlement is used in making the calculation.

The ratio of "gross settlement to expenses incurred" presents a sunnier picture than the ratio of "net settlement to economic loss." The largest group of those who received settlements received substantially more than their expenses, while only a fifth received substantially less than expenses (Figure 6-15).

FIGURE 6-15—GROSS TORT SETTLEMENT AS A PERCENT OF EXPENSES INCURRED
(Percentage distribution of serious injury cases)



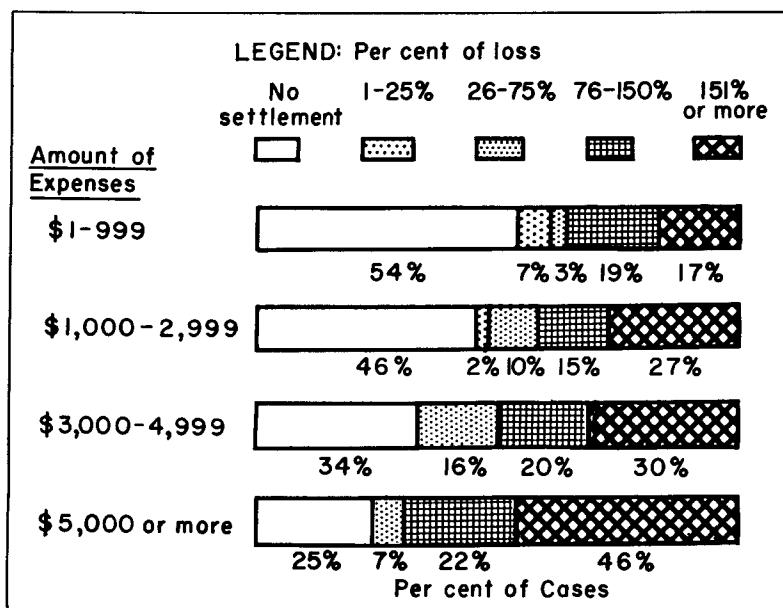
Number of interviews providing this information: 298.

The ratio of gross settlement to expenses incurred was also a more orderly performer than the prior ratio, with respect to its consistency in varying expense brackets. When settlement was

made, it was usually generous in relation to expenses incurred. Ratios of more than 150 percent were numerous among claims of every size (Figure 6-16).

Another interesting feature appeared in relation to expenses incurred; the greater the expenses, the smaller the proportion of cases with no settlement.

FIGURE 6-16—GROSS TORT SETTLEMENT AS A PERCENT OF EXPENSES INCURRED IN CASES WITH VARYING AMOUNTS OF EXPENSES (Percentage distribution of serious injury cases)



Number of interviews providing this information: 74, 144, 46, 35.

Although low ratios of settlement are infrequent when settlements are compared with expenses incurred, they do persist. Their persistence corroborates the view that many cases are compromised for an amount which does not correspond to anyone's estimate of the actual loss or expense. More important, the data suggests the probability that future economic losses are outweighed, as reparation measures, by the more easily estimated and proved

"expenses incurred." It is possible that injured persons find it difficult to insist on present payment for something so uncertain as future income losses.

G. THE BARGAINING PROCESS

Since some claims are settled for more than double the apparent amount of economic loss, and others for less than half of it, one might expect the parties would start their bargaining from rather distant positions. It seems to be the prevailing tradition that the first step is a call on the injured person by the liability insurance adjuster. The injured person then tells the adjuster about his expenses and his past and expected future losses.

At this point, or soon after, it seems to be common for the insurance adjuster to offer a specific amount in settlement; less frequently, the injured person states the amount which he would accept. In many cases, this initial offer or demand is turned down, with or without the other party's naming a figure which he would accept. If there is no agreement, the injured person who wants to collect his claim will have to go on to further stages of litigation such as hiring a lawyer, filing suit, and preparing for trial. At some point before payment is coerced by the arm of the law, the insurer or the claimant will probably again propose settlement; if this is rejected, the process will be repeated by one side or the other until the minds meet.

1. *First Offers*

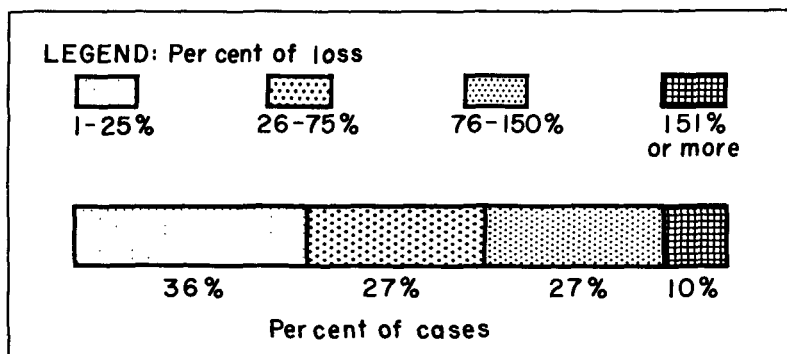
In order to obtain a view of the bargaining process, the survey included a question about the amount of the first offer received by the injury victim. Of those who reported a settlement, less than half reported a "first offer." The smallness of this fraction may have resulted from any of a number of causes. The amount may have been forgotten. If the injury victim went to a lawyer before he received an offer from an adjuster, he might not have known what offer if any the insurer initially made. If the adjuster's first

proposal was *accepted*, the injured person may not think of it as a "first offer," and might not answer the question for that reason. The precise questions asked are shown in the injured person's questionnaire, reprinted in the appendix (questions F19-F20c).

One of the "observers" of the study appointed by the Michigan State Bar believes that injured persons' perceptions and recollections of "first offers" are unreliable, because of a tendency to exaggerate what was offered, and to mistake for an offer some figure which may have been only casually mentioned.

First offers are most interesting when compared with other figures. One comparison was made by calculating the ratio of first offers to economic losses. These ratios showed a dispersion very like that of the settlement-to-loss ratios considered earlier, except that the concentration in the lower ratios was slightly more pronounced. Well over half of the cases showed a ratio of less than 76 percent of economic loss.

FIGURE 6-17—FIRST OFFER AS A PERCENT OF ECONOMIC LOSS
(Percentage distribution of serious injury cases
in which a tort settlement and a first offer were received)



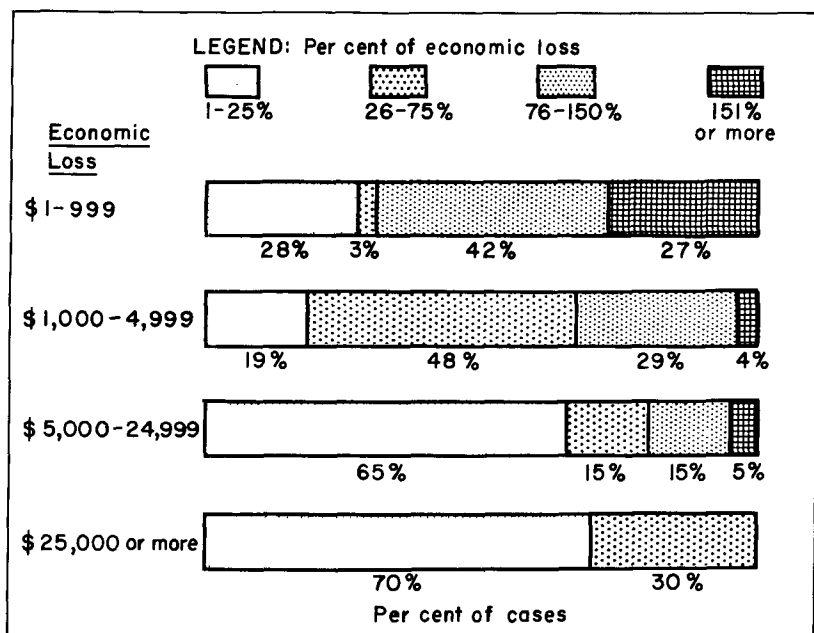
Number of interviews providing this information: 78.

The dispersion of ratios becomes more significant when the cases are classified by amount of economic loss. Where the economic loss was under \$1000, the distribution was fairly symmetrical; there were almost as many offers to pay more than 150

percent of the loss as there were to pay under 25 percent. The largest fraction of offers was in the 76-150 percent bracket. On the other hand, when the economic loss was over \$1000, relatively few offers surpassed 75 percent; they grew fewer as the amount of loss rose. In these cases, the natural lack of inclination and ability to pay large sums was probably reinforced by the fact that much of the loss had not materialized when the "first offer" was made.

It must be remembered that all the analyses in this section concern only "serious injuries." Among minor cases where the other party was at fault and insured, offers equal to or larger than losses may well have been much more common.

FIGURE 6-18—FIRST OFFER AS A PERCENT OF ECONOMIC LOSS, IN CASES WITH VARYING AMOUNTS OF ECONOMIC LOSS
(Percentage distribution of serious injury cases in which a tort settlement and a first offer were received)



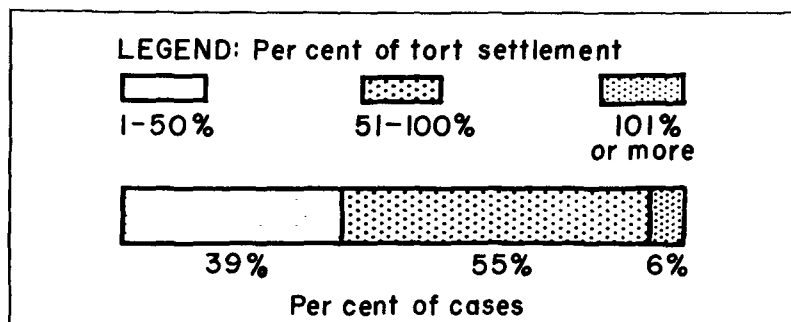
Number of interviews providing this information: 15, 32, 22, 9.

A most interesting question for the purposes of understanding the dynamics of claim settlement is whether the eventual settlements were larger than the first offers, and, if so, how much. In order to examine this problem, the first offer was divided in each case by the amount of the gross settlement (without deduction of an attorney's fee). The result is called "first offer as a percent of tort settlement." In reading these results, it must be remembered that the word "settlement" has been used to include all payments on account of tort liability, including payments after verdict or judgment (see page 181, *supra*).

Perhaps the most interesting result of this comparison is that 6 percent of the respondents admitted having received a first offer which was larger than their eventual gross settlement. Another 55 percent of the respondents reported first offers which were more than half of the eventual settlement. That left only 39 percent whose first offer was less than half of their eventual settlement (Figure 6-19).

One of the factors which seemed to relate to ratio of first offer to tort settlement was the amount of the economic loss which the subject eventually sustained (Figure 6-20). It is probably significant that the first offers which *exceeded* the final tort settle-

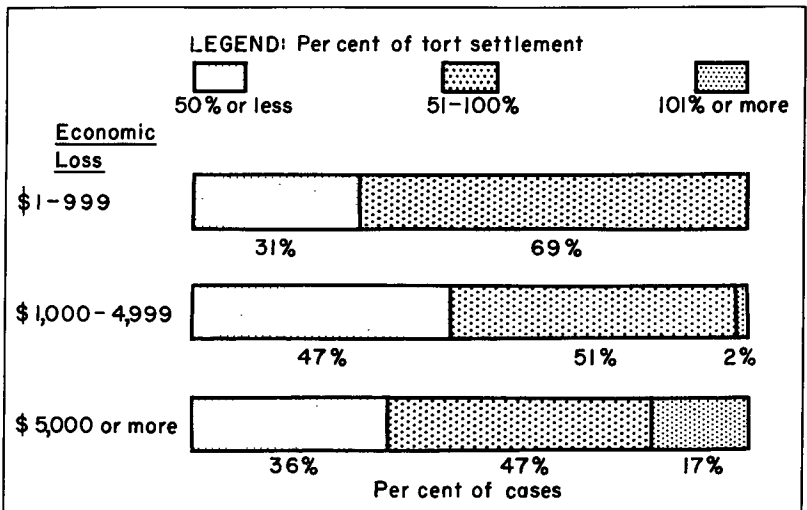
FIGURE 6-19—FIRST OFFER AS A PERCENT OF TORT SETTLEMENT
 (Percentage distribution of serious injury cases in which a tort settlement and a first offer were received)



Number of interviews providing this information: 75.

ment were more frequent when the losses were larger. When coupled with Figures 6-14 and 6-18, this suggests that people with large losses were likely to pass up offers which seemed small in relation to losses, but which may have been generous in relation to prospects of successful litigation.

FIGURE 6-20—FIRST OFFER AS A PERCENT OF TORT SETTLEMENT FOR VARYING AMOUNTS OF ECONOMIC LOSS (Percentage distribution of serious cases in which a tort settlement and a first offer were received)

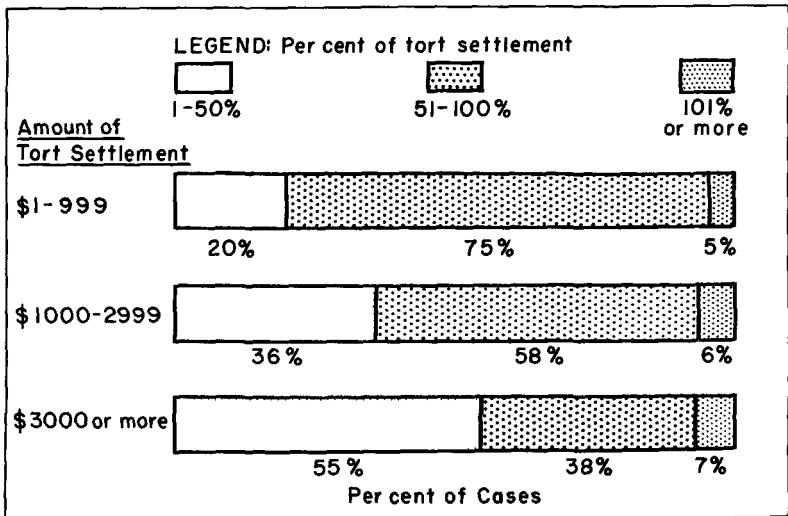


Number of interviews providing this information: 15, 28, 31.

Another factor which varied significantly with the first offer ratio was the amount of the tort settlement (Figure 6-21). Particularly noticeable is the decrease in the ratio as the size of the eventual settlement rises. Where the eventual settlements were under \$1000, the initial offers were usually more than half of that; the average was 67.8 percent. But where the settlements were over \$3000 the initial offers were generally less than half of the eventual settlement, and the average ratio was just 50.9 percent. There were not enough cases of settlements over \$10,000 to make a separate distribution for that bracket.

Although the rising proportion of low offers is striking, another factor in the distribution is equally significant. That is the persistence of a small group in which the original offer was more than the claimant eventually settled for. This group persisted even among the cases of settlements over \$10,000 (not shown). In other words, some injury victims turned down offers of over \$10,000 and later accepted less.

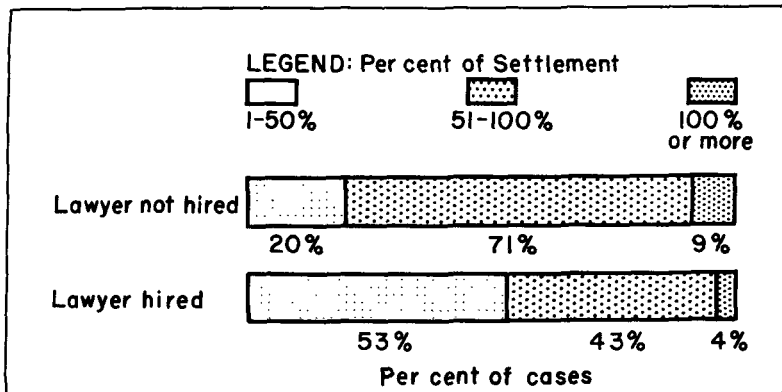
FIGURE 6-21—FIRST OFFER AS A PERCENT OF TORT SETTLEMENT FOR VARYING AMOUNTS OF SETTLEMENT
(Percentage distribution of serious injury cases in which a tort settlement and a first offer were received)



Number of interviews providing this information: 20, 28, 27.

Although the amount of money involved seemed to be the most important variable affecting the first-offer-to-settlement ratio, there was also a significant difference in the distribution pattern depending upon whether or not the injured person hired a lawyer. In lawyer-represented cases, the ratios were generally lower; or, as a lawyer might prefer to say, the settlement was a higher multiple of the first offer (Figure 6-22). The respondents' answers did not distinguish between first offers made before or after a

FIGURE 6-22—FIRST OFFER AS A PERCENT OF TORT SETTLEMENT
IN CASES SETTLED WITH AND WITHOUT LAWYERS
(Percentage distribution of serious injury cases in
which a tort settlement and a first offer were received)



Number of interviews providing this information: 32, 43.

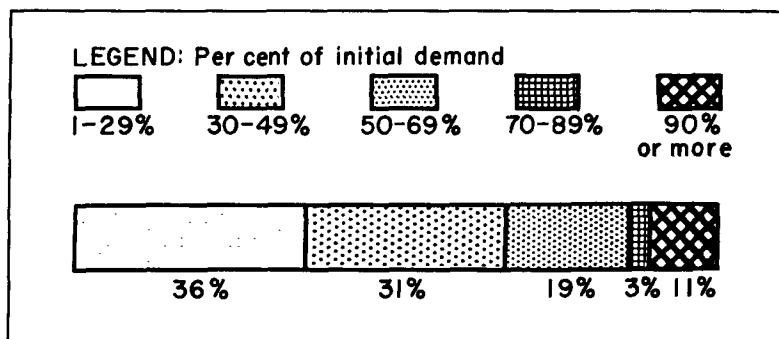
lawyer was hired; presumably the answers included offers of both kinds.

2. Initial Demands and Damage Allegations

To compare with adjusters' first offers, it would have been interesting to have a record of the initial demands of injured persons. In the hope of obtaining such a record, injury respondents were asked, "At that time [the time of the first offer], did you mention to them some sum of money that you would accept?" The question was generally answered negatively or not at all, so that no significant comparison could be made between offers and demands, or between demands and eventual settlements. However, the absence of answers is itself significant. It shows that claimants did not usually take a position as to the amount owed them; rather they awaited offers to which they responded "enough" or "not enough."

Lawyers for plaintiffs were also asked about initial offers and about their demands, and they were generally able to answer. Two-thirds of the initial offers were for less than half of the

FIGURE 6-23—FIRST OFFER AS A PERCENT OF INITIAL DEMAND
(Percentage distribution of serious injury cases;
plaintiffs' lawyers' responses)



Number of interviews providing this information: 49.

amount that the lawyer was demanding. This distribution is shown in Figure 6-23.

Another figure of some interest in connection with the bargaining process is the allegation of damage in the complaint filed on behalf of the injury victim when suit is started. Many lawyers protested against reporting this amount at all, on the ground that it is notoriously unrelated to any actual expectation. One lawyer, when asked how much he had sued for in a particular case replied, "Oh, the usual astronomical amount."

But in the interest of documenting the actual significance or insignificance of the damage allegation (often called by lawyers "*the ad damnum clause*"), these allegations were recorded and compared with settlements. Of the suits which claimed from \$10,000 to \$25,000, more than two-thirds were settled for less than \$5000. Of those which claimed \$50,000 or more, three-fourths were settled for less than \$10,000, and so on. The average damage allegation of \$46,910 compared with an average settlement of \$5408.

H. DETERMINANTS OF BARGAINING BEHAVIOR

Why do some injury victims push their claims to ultimate

judgment, while others drop theirs without payment? Why do some hold out for all their economic loss, while others settle for a small fraction of it? Looking at the matter from the other side, why do defendants pay some claims so generously, and others so scantily, or not at all?

In order to illuminate these subjects, a number of questions were posed to injury victims and to lawyers for claimants and defendants.

Injury victims who received no tort settlement were asked why not. Their reasons were widely scattered, but over half of them related to the fault problem; either no one was thought to be at fault, or the victim considered that he himself, or a member of his

TABLE 6-2

*Injured Persons' Reasons for not Receiving a Tort Settlement
(percentage distribution of serious injury cases
in which no tort settlement was received)*

<i>Reasons involving supposed improbability of getting any settlement</i>		80%
Nobody to collect from; nobody else at fault; the person at fault unknown or address unknown; injured person at fault, or member of family at fault	68%	
The person at fault had no insurance, or no money	12%	
<i>Reasons involving unwillingness to push claim</i>		3%
The person at fault was a friend or relative	2%	
Too expensive to try to collect; couldn't afford a lawyer	1%	
<i>Other reasons</i>		17%
Our insurance company took care of it	2%	
Still trying to collect	8%	
Unclassified	7%	
TOTAL		100%
Number of interviews		134

TABLE 6-3

*Injured Persons' Reasons for not Seeing a Lawyer
(percentage distribution of serious injury cases where
no settlement was received and no lawyer seen)*

<i>Reasons involving supposed improbability of getting any settlement</i>		65%
It wasn't the other fellow's fault; couldn't find the person whose fault it was, or his address; injured persons' own fault, or fault of member of own family	39%	
Person at fault had no insurance or assets	2%	
Injured person did not think he could get settlement, but gave no reason	24%	
<i>Reasons involving unwillingness to litigate</i>		11%
Injury didn't amount to much	2%	
Person at fault was friend or relative	6%	
Couldn't afford a lawyer	3%	
<i>Other reasons</i>		24%
Claim was handled by own insurance company	3%	
Intend to see a lawyer in the future	2%	
Unclassified	19%	
TOTAL		100%
Number of interviews		120

immediate family, was the faulty one. A significant fraction—over a tenth of those who got no settlement—laid it to the lack of any assets or insurance held by the party who was at fault. These answers were given by people who had hired lawyers as well as by those who had not, so they doubtless included some reasons which the claimants had heard from their lawyers, and passed on to the interviewer (Table 6-2).

A more penetrating inquiry into the reasons for noncollection would separate the various decisional stages. The first of these, for most injury victims, would be the decision whether to see a lawyer in order to get a settlement or a larger settlement than the defendant had offered. Reasons given for not seeing a lawyer

were generally the same as those for not getting a settlement. Most of them related to the absence of fault on anyone else's part, or the presence of fault on the part of the claimant or his immediate family. Evidently these respondents considered themselves competent to estimate their chances of winning without aid of professional advice. Financial irresponsibility of the tortfeasor was mentioned much less frequently than in answer to the question about why no settlement was received (Table 6-3).

There was an interesting difference between the reasons given for not seeing a lawyer in the small and the large cases. Where the amount of economic loss exceeded \$5000, the "unwillingness to litigate" reasons and the "other reasons" disappeared. All those with losses over \$5000 who did not see a lawyer gave a reason involving supposed improbability of getting any settlement.

Claimants who hired a lawyer but did not file suit were asked why they did not take this further step. Most of the answers were too diverse to permit meaningful classification. The only interesting factor which emerged was that many more respondents characterized the decision not to sue as their own (31 percent) than referred to it as the decision of their lawyer (9 percent).

Considerably more information was obtained from injured persons' lawyers, when they were asked what were the principal sources of controversy between themselves and counsel for defendants. These questions were asked only in court-filed cases, which included some injuries classified as "minor," along with the "serious." The answers which far outdistanced all others were those which related to whose fault it was that the accident happened. The distribution of these and other answers is shown below in Table 6-4.

Following the free-answer question reported on in Table 6-4, claimants' lawyers were handed a card naming five possible areas of disagreement, and were asked, "Which of the following items, if any, were major sources of disagreement between yourself and the defense counsel?" If any of the items on the card was men-

TABLE 6-4

Claimants' Lawyers Reasons for Disagreement
(percentage distribution of answers in court cases)^b

<i>Major points of disagreement between claimant's lawyer and defense counsel^a</i>		
<i>Total reporting disagreement (by area of disagreement)</i>		101% ^c
Who was at fault (how accident happened)	55	
Whether claimant's ailments resulted from the accident or from independent causes	5	
The medical prognosis (future costs of injury)	3	
Damages:		
Value of wages and services lost (past or future)	1	
Valuation of pain and suffering	1	
Extent of value of injury (general comment)	13	
Damages (general comment)	18	
Other areas of disagreement	5	
<i>Total reporting no disagreement</i>		9
<i>Not ascertained</i>		6
Total		116% ^c
Number of interviews		148

^a The question was: "What were the main points on which you and the defense counsel disagreed?"

^b Excludes one case for which the plaintiff's lawyer stated that no suit had been filed, although survey records indicated that it had been.

^c Since some lawyers reported more than one area of disagreement, the total exceeds 100%.

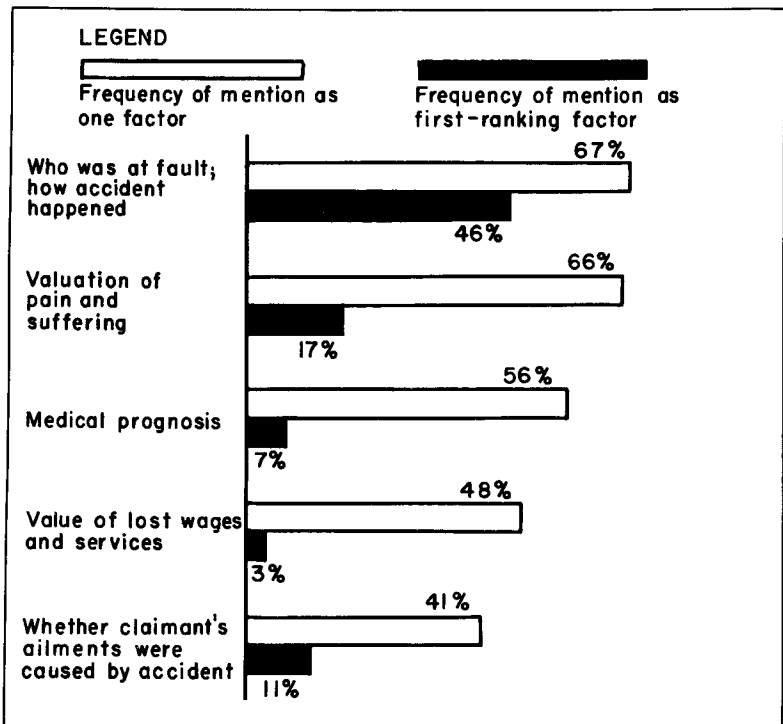
tioned, the lawyer was asked, "Would you rank them in order of importance—'one' for the most important, 'two' for the next, and so on?" Some lawyers ranked all five items; other ranked only one or two, while indicating that others were nevertheless "major sources of disagreement"; a number of lawyers spontaneously indicated some of the answers as not being factors in the particular case.

The claimants' lawyers responses are presented in Figure 6-24.

As in the free answers to the preceding question, the fault question held first place; it was mentioned as one of the major factors in 67 percent of the cases, and ranked as the foremost source of disagreement in 50 percent of them. On the other hand, 25 percent of the answers indicated that it was *not* a major factor in that case.

More surprising was the forward surge of the answer, "valuation of pain and suffering." The proportion of cases in which it was a factor (66 percent) was nearly the same as for negligence, and the number excluding it as a factor was *less* than for neg-

FIGURE 6-24—CLAIMANTS' LAWYERS' SELECTION OF REASONS FOR DISAGREEMENT
(Percentage distribution of answers in court cases)

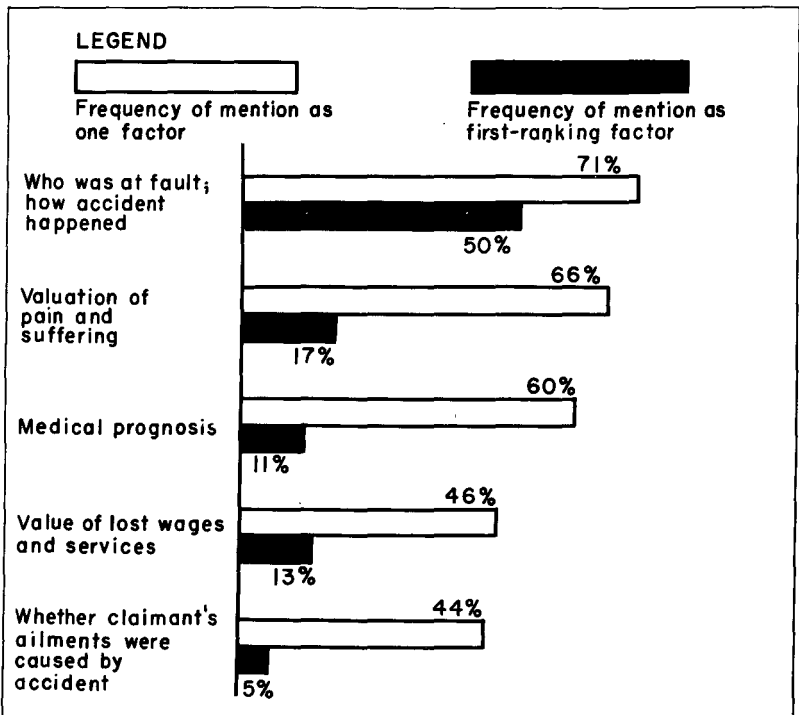


Number of interviews providing this information: 148.

ligence. Third place was taken by "medical prognosis," which was entirely excluded in only 28 percent of the cases, but was very rarely (in only 7 percent of the cases) the leading factor. Fourth and fifth place in prominence were taken by "value of wages and services lost," and by "whether the accident caused claimant's ailments." Figure 6-24 shows the frequency of first-place ranking and the frequency of mention.

Exactly the same question, with the same preformulated answers, was presented to defendants' counsel, and the results were strikingly similar. The fault question again led in frequency of

FIGURE 6-25—DEFENDANTS' LAWYERS' SELECTION OF REASONS FOR DISAGREEMENT
(Percentage distribution of choice of answers in court cases)



Number of interviews providing this information: 157.

mention and in frequency of ranking. The valuation of pain and suffering was again a close second in frequency of mention, and again a very poor second in frequency of first ranking. Medical prognosis was again third in both departments. Wage loss and causation switched positions, but remained close together at the end of the list. Figure 6-25 summarizes the defendants' lawyers responses.

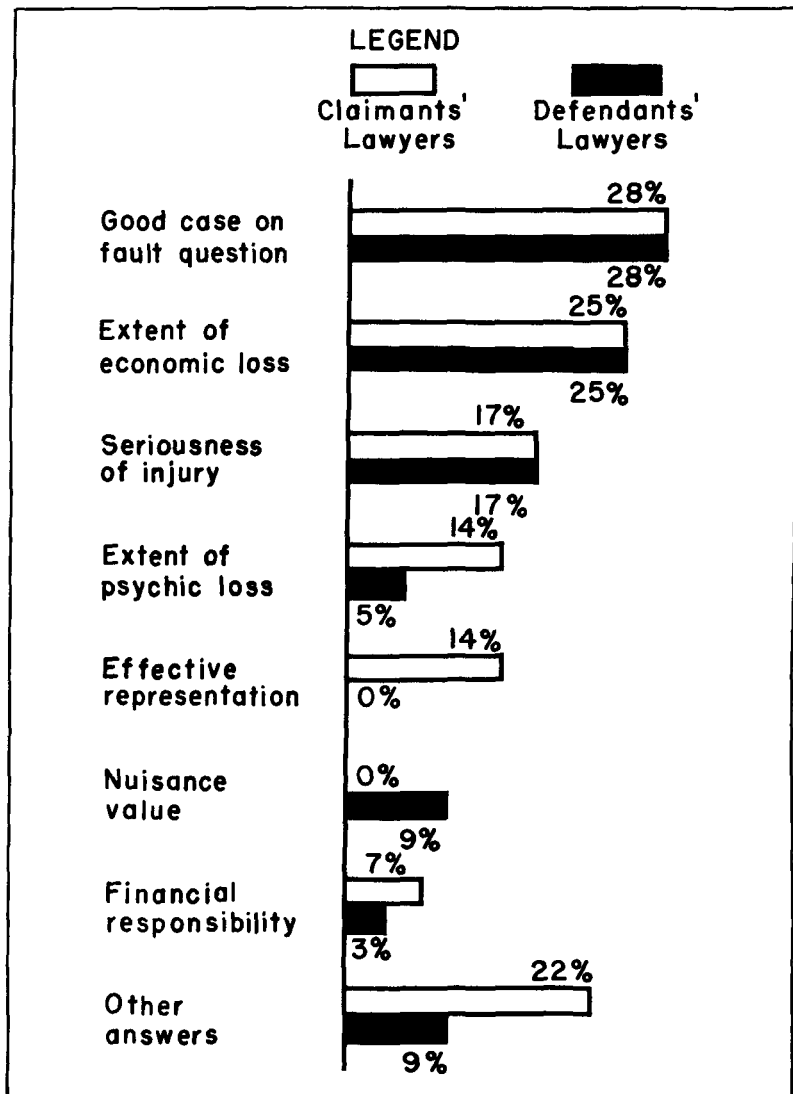
Another approach to studying the elements of controversy was to ask plaintiffs' and defendants' lawyers what were the elements contributing to an increase in the amount of settlement, and what were the factors tending to restrict it. No prepared answers were offered, and it was necessary to classify a great variety of answers received. Lawyers might, and often did, mention more than one factor. These questions were asked for all court cases including a few which involved only "minor" injuries.

The responses were classified in the following categories:

- (1) "Good case on fault question" including such responses as strong evidence of liability of other party, no question of fault, no contributory negligence, other party's having been "ticketed" or had license revoked.
- (2) "Extent of economic loss" including past and future expenses for doctors, hospitals, nursing, household help, wage loss, future income loss, property damage.
- (3) "Seriousness of the injury."
- (4) "Extent of psychic loss," including past and future disfigurement, suffering, psychological impact, humiliation, grief.
- (5) "Effective representation" by claimant's lawyer (mentioned only by claimants' lawyers).
- (6) "Nuisance value of case" (mentioned only by defendants' lawyer).
- (7) "Ability to pay," including fact that defendant was insured, or that his insurance was adequate, or that defendant has other assets.
- (8) "Other answers," too scattered to classify.

The most striking fact about the answers to these queries was the high compatibility between the answers of claimants' and

FIGURE 6-26—FACTORS AUGMENTING TORT SETTLEMENT
 (Percentage distribution of answers of claimants'
 and defendants' lawyers in court cases)



Number of interviews providing this information: 125, 137.

defendants' lawyers. Both sides agreed in awarding first, second, and third place to "good case on fault question," "extent of economic loss," and "seriousness of the injury." The results are graphically presented in Figure 6-26.

The relative prominence of some of the elements varied considerably with the size of settlement. Plaintiffs' lawyers mentioned psychic loss as a factor in only 5 percent of the cases settled for under \$1000, but in 27 percent of the cases settled for more than \$10,000. The fault question varied in the opposite direction; it was mentioned by claimants' lawyers in connection with about 30 percent of the settlements under \$10,000, but in only 15 percent of those over that amount. Defense counsel mentioned the extent of the claimant's economic loss as a factor in 73 percent of the cases settled for more than \$10,000, but in only 11 percent of those settled for less than \$1000. The "nuisance" element was mentioned only in connection with cases settled for less than \$1000.

Plaintiffs' and defendants' lawyers were also asked to suggest, without prompting, factors which prevented the amount of settlement from being larger than it was. On these factors there was much less agreement, although there were areas of consistency. The responses were classified under headings of which the following were most frequently mentioned:

- (1) "Extent of the loss" (size of loss would not support a larger settlement).
- (2) "Weak case on fault" (doubt or inadequate proof).
- (3) "Claimant's desire to settle," didn't want to go any further, wanted or needed money, wanted to leave town, reluctant or afraid to litigate or go to trial (mentioned only by claimants' lawyers).
- (4) "Inability to pay" (lack of assets or insurance, or policy limits of insurance).
- (5) "Inadequate proof of loss," no proof of damages, no proof of earnings, did not see a doctor, difficulty of proving pain and suffering.

- (6) "Inadequate proof of cause" (ailment may have existed before accident).
- (7) "Other answers," too scattered for classification.

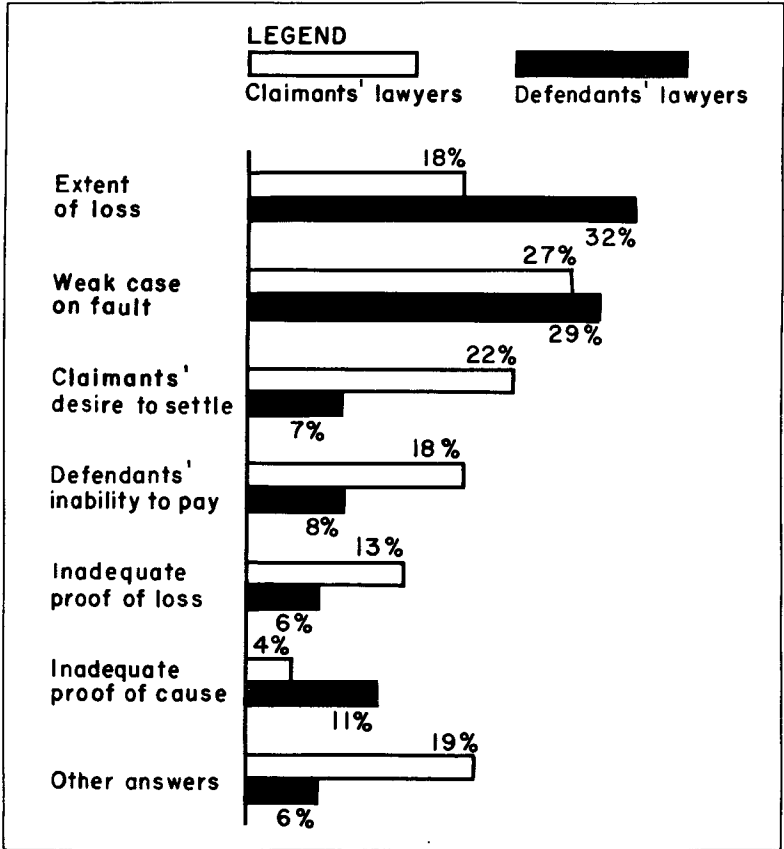
There was a high degree of agreement between plaintiffs' and defendants' counsel in their frequency of emphasis on the weakness of proof of fault. Plaintiffs' counsel mentioned it in 29 percent of the cases, and defendants' counsel in 27 percent. On nearly everything else, they differed widely in frequency of mention, with some differences suggestively related to the presumable bias of the respective counsel. Defense counsel thought that the limited extent of loss prevented the settlement from being larger in 32 percent of the cases, while plaintiffs' counsel detected this as a limiting factor only in 18 percent. On the other hand, inadequate *proof* of loss was seen by claimants' lawyers as a limiting factor in 13 percent of the cases; defendants' counsel detected it in only 6 percent. Their views are contrasted in Figure 6-27.

Some factors varied in importance with the amount of the settlement. Inadequacy of proof of loss or of causation was never mentioned by claimants' lawyers as a factor in cases where the settlement was over \$10,000, although it was named in 5 percent of the cases with smaller settlements.

The extent of the claimants' losses was regarded by defendants' lawyers as a restricting factor in only 15 percent of the settlements of \$10,000 or more, although they detected it in 36 percent of the settlements under \$5000. Plaintiffs' lawyers gave "extent of loss" about the same rating in small settlements as in large ones.

The defendant's inability to pay—for lack of insurance or of private assets—was quite differently seen by different observers. Claimants' lawyers thought it dampened the settlement in 18 percent of the cases, while defendants' lawyers detected it in only 8 percent. Both sets of attorneys agreed that its importance depended on the size of the settlement. In settlements of \$10,000 or more, claimants' lawyers saw the lack of assets or insurance

FIGURE 6-27—FACTORS LIMITING AMOUNT OF TORT SETTLEMENT
(Percentage distribution of answers of claimants' and defendants' lawyers in court cases)



Number of interviews providing this information: 112, 127.

limits as a negative factor in 43 percent of the cases, while defendants' lawyers recognized it in only 27 percent. In settlements under \$1000 the two sets of lawyers mentioned lack of assets with approximately equal frequency—11 and 13 percent for defendants' and plaintiffs' counsel, respectively. (At this level, none mentioned "lack of insurance.")

The survey produced a few other bits of information on ability

to pay, as affected by liability insurance. Injured persons were asked whether the driver of the automobile involved (the "other car" if there were two) had insurance. Of those who answered, 86 percent said "yes," and 14 percent, "no."

Injured persons who did not obtain a tort settlement were asked why not, and 12 percent blamed the defendant's lack of insurance or other assets (Table 6-2, *supra*). When injured persons who did not hire a lawyer were asked why not, 2 percent of them gave as a reason the fact that the party responsible for the accident was uninsured or had no assets (Table 6-3). A limited group of individual (unincorporated) defendants in suit cases were asked whether they had paid any part of the settlement from their own pockets; 3 percent of them said that they had (Table 8-20).

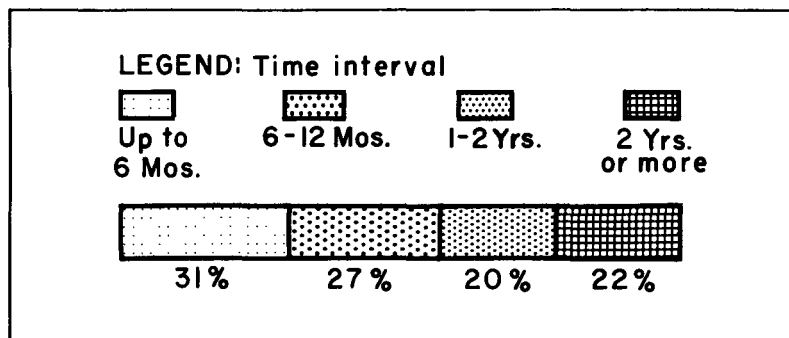
I. TIME INTERVALS IN TORT SETTLEMENTS

The length of time from injury to settlement is very important to injury victims. During that time there is likely to be hesitation to obtain the fullest desirable medical treatment, for fear of the burden of paying for it. If the victim is a wage earner, the family may well go on reduced rations, and even become a "relief case" while awaiting the settlement. Furthermore, many settlements which lawyers on both sides regard as being less than the economic loss are accepted by injury victims because of their desire to get over the waiting period; this may be because of need for subsistence, or of need to escape from the anxiety involved in litigation.

Taking the entire group of serious injury cases, 31 percent were settled within six months of the accident, and 50 percent within less than a year. Twenty-two percent waited more than two years for settlement. The distribution of settlement intervals for all serious injury cases is indicated in Figure 6-28.

What are the factors which lead to differences in time to settle? It might have been suspected that cases involving greater amounts of economic loss would require more time to settle, but no such

FIGURE 6-28—TIME FROM INJURY TO TORT SETTLEMENT
(Percentage distribution of serious injury cases
in which a settlement was received)

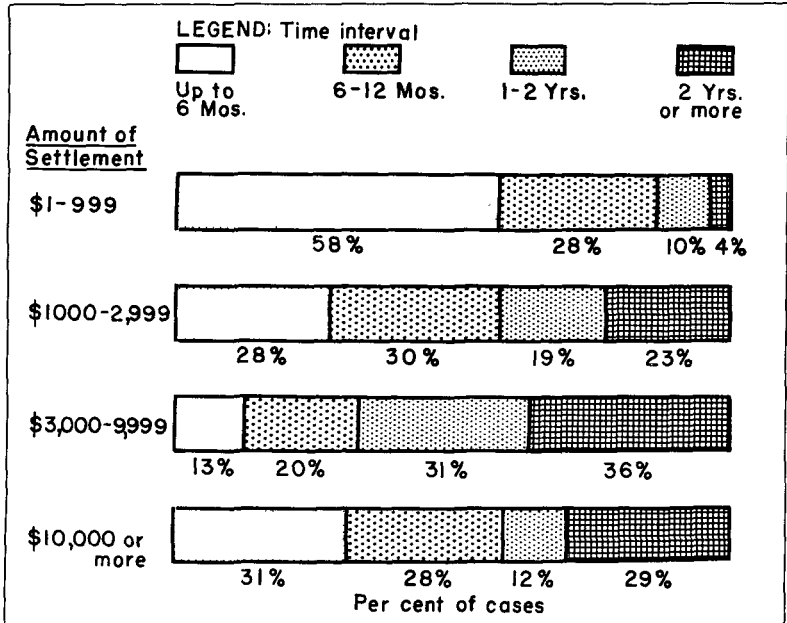


Number of interviews providing this information: 190.

correlation appeared. The largest fraction of cases were settled within six months, whether the loss was under \$1000 or over \$10,000, or in any intervening bracket. In fact, the percentage of cases settled within six months were slightly larger for the over-\$25,000 loss group than for any of the smaller loss groups. (These relationships are not presented graphically.)

On the other hand, a separation of cases by *amounts for which they were settled* disclosed an extremely sharp correlation between amount of the settlement and time taken to get it. Of settlements under \$1000, 58 percent were made within six months, and 86 percent within one year. But among settlements of \$1000 to \$2999, only 28 percent were made within six months, and only 58 percent within a year. These data suggest that the man who has a severe injury is likely to settle for it quickly only if he settles for a relatively small amount. This presumably results, at least in part, from the necessity of letting several months pass in order to establish the full extent of a severe injury (see Chapter 7, section E, *infra*).

FIGURE 6-29—TIME FROM INJURY TO SETTLEMENT FOR SETTLEMENTS OF VARIOUS AMOUNTS
(Percentage distribution of serious injury cases in which a tort settlement was obtained)

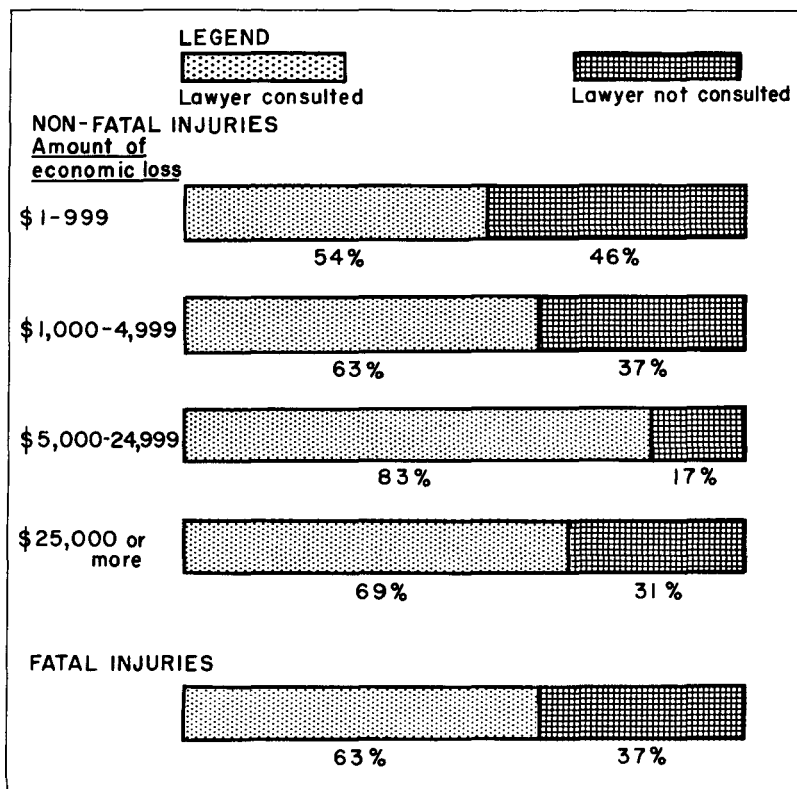


Number of interviews providing this information: 44, 58, 51, 37.

J. CONSULTING AND HIRING LAWYERS

Persons involved in serious injuries—usually the victim himself, but sometimes the survivor of a decedent, or the parent of a minor—were asked whether a lawyer was consulted about collecting a tort settlement. Thirty-seven percent answered “no.” These responses were received in cases of death and of high economic loss, as well as in cases of lesser injury. Consultation was, however, more prevalent in the cases of greater loss. The distribution is shown in Figure 6-30. Reasons given for not seeing a lawyer are presented in Table 6-3 (*supra*).

FIGURE 6-30—CONSULTATION OF LAWYERS
(Percentage distribution of serious or litigated cases)



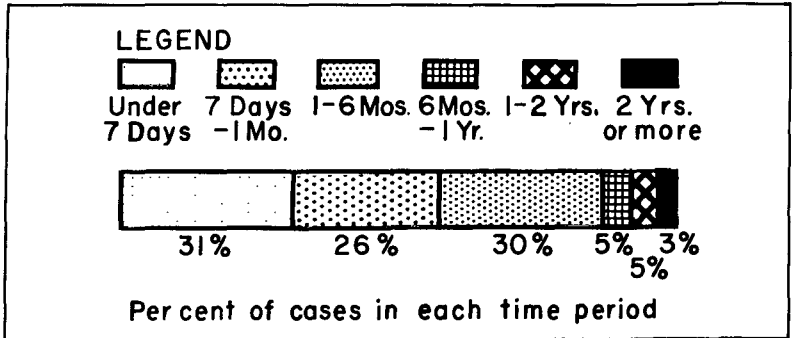
Number of interviews providing this information: 67, 111, 45, 17, 127.

1. Time Intervals

Of those who did consult a lawyer, 31 percent did so within a week, 57 percent within a month, and 87 percent within six months. Only 13 percent straggled in at greater intervals. Figure 6-31 shows the frequency of various intervals.

The seriousness of the injury did not have a very important effect on the time permitted to pass before seeing a lawyer, except that the percent of persons seeing a lawyer within a week was much greater in the cases of less serious injuries. Otherwise there was little difference.

FIGURE 6-31—TIME BETWEEN INJURY AND SEEING A LAWYER
(Percentage distribution of serious injury cases
in which a lawyer was seen)



Number of interviews providing this information: 183.

2. Choice of Lawyer

Claimants' reasons for deciding which lawyer to consult varied sharply in relation to family income. For claimants with family incomes of \$7500 or more, the predominant factor in choice of a lawyer was prior use of the same practitioner's services; 36 percent gave this reason. This reason affected only 28 percent of the middle income group (\$5000-7499) and only 17 percent of the low income group (under \$5000). For the middle and lower income groups, the most frequent reason for choice was the recommendations of a friend; 38 percent of those in the lower income group, 33 percent of those in the middle income group. A family member's recommendation influenced 31 percent of the lowest income group, but only 21 percent of the middle income group and 19 percent of the highest income group. Table 6-5 presents the salient features for these three groups.

3. Hiring a Lawyer

The hiring of lawyers does not necessarily conform to the same pattern as the consultation of lawyers. In fact, 16 percent of those

TABLE 6-5

*Reasons for Choosing Lawyer
distributed by
Family Income of Respondent
(percentage distribution of serious injury cases
in which a lawyer was consulted)*

<i>Reason for choosing the lawyer who was consulted</i>	<i>All cases</i>	<i>Family Income of Respondent</i>		
		<i>Less than \$5000</i>	<i>\$5000- \$7499</i>	<i>\$7500- or more</i>
Recommended by a friend	35%	38%	33%	35%
Had used his services before	26	17	28	36
Recommended by a member of the family	24	31	21	19
Recommended or hired by respondent's insurance company	5	6	4	4
Recommended by a legal aid bureau or public official	1	1	2	0
Other answers	9	7	12	6
Total	100%	100%	100%	100%
Number of interviews	195	71	67	57

who consulted a lawyer did not hire one. In several of these cases, the lawyer himself advised against his being hired.

Attempts were made to discover other factual elements which varied significantly with the decision to hire a lawyer. The most definite correlation was with the amount of the economic loss suffered as a result of the injury. In cases of economic loss of less than \$1000, about a third of the claimants hired lawyers; in cases with losses of over \$5000, more than two-thirds hired lawyers. There was also a markedly greater tendency of older people to hire lawyers; lawyers were hired by 29 percent of those between 16 and 24, 45 percent of those between 25 and 44, and 55 percent of those over 45. The tendency to hire a lawyer was

somewhat greater among persons with more education and with higher family income.

Prior experience in hiring lawyers did not correlate significantly with the decision to hire a lawyer for the personal injury in question. Those who had hired a lawyer before, and those who had not, hired lawyers for their personal injuries with equal frequency. The question related to prior hiring for any purpose; those who had previous personal injury experience were too few for significant measurement.

Another factor which had surprisingly little visible influence on the decision of whether or not to hire a lawyer was the respondent's opinion on whether a lawyer helps to get a larger settlement. Respondents were asked, "Do you think an insurance company will usually offer a larger settlement if you have a lawyer than if you don't?" Nearly three-fourths answered yes, while the rest gave negative or equivocal answers. But only half of the affirmative respondents hired lawyers, while 42 percent of the negative respondents did likewise.

K. PROBLEMS OF CLAIMS HANDLING AS SEEN BY LAWYERS FOR CLAIMANTS

In the course of interviewing lawyers who had represented injured persons in law suits, it was found convenient to solicit their views on what, if anything, is wrong with the handling of automobile personal injury claims in Michigan. The questions asked were:

"On the basis of your experience, do you feel that there are any major problems in the way auto injuries are handled in Michigan? How would you suggest these problems be reduced?"

Answers to both questions were combined for analysis.

Unfortunately the design of the survey did not permit asking the same question of lawyers who had represented defendants. For independent reasons, the defendants' lawyers' questionnaires were administered chiefly by mail, and it was judged unlikely that

lawyers would respond freely in writing to an unstructured inquiry of this sort.

The views collected provide significant clues for the study and evaluation of claim handling, provided that the principal characteristics of the statements are kept in mind. These might be summarized as follows:

(1) They are statements about the *problems* of claim handling, and are not overall evaluations of it.

(2) They are statements made orally and offhand, and presumably differ in some degree from what would be said on further reflection.

(3) They are statements of lawyers selected by virtue of representing claimants, and made in the context of discussing an injured person's claim; presumably they are weighted in favor of proclaimant views.

(4) They are statements by a random selection of plaintiffs' representatives, including some lawyers who had rarely handled such claims, and some who had more frequently represented defendants; the statements do not represent exclusively the views of claimant specialists.

Several important facts arose from an analysis and tabulation of the answers. First, an overwhelming majority of the lawyers who had represented injured persons (80 percent) thought that major problems exist, while a very minor fraction (15 percent) thought there were "no major problems." Still less (5 percent) gave undecided or ambivalent answers.

A second fact which stood out was that these lawyers concurred significantly on the main areas which bothered them. Some mentioned more than one area, so that the total number of mentions exceeds 100 percent of the lawyers polled. The main areas in order of frequency were (1) delay in the courts—cited by 30 percent of lawyers; (2) attitudes and practices of insurance companies—cited by 28 percent; and (3) inadequacy of compensation of claimants—cited by 24 percent. The last two areas presumably

reflect the claimant-orientation of the lawyers in the sample; and the first may also reflect this point of view.

Another set of problem areas were concurred in by significantly smaller groups of lawyers. These were (1) inadequacy of the jury system, (2) attitudes and practices of claimants' lawyers, and (3) problems relating to expert witnesses. Several of the statements in these categories—especially those on claimants' lawyers—seemed to reflect greater sympathy with defendants' positions than with claimants, although they may have been based on the view that bad claimants' lawyers' practices spoil things for the good claimants' lawyers. The interviews did not go into sufficient depth to probe the rationale of the statements. Some of the statements may be attributed to the fact that some of the lawyers who had represented claimants in the survey were customarily on the other side of the argument.

A large number of answers (20 percent all together) were given by so few persons that their frequency cannot be considered significant. Among these the contributory negligence rule, the idea of comparative negligence, and the rule on mentioning insurance to the jury were mentioned by more than one lawyer. Various other topics were mentioned by only one.

Table 6-6 summarizes the views of problem areas given by the sample of lawyers representing injured persons in personal injury suits.

Quotations from lawyers' answers

In order to show more specifically the aspects of claim handling which the questioned lawyers identified as problems, quotations from numerous answers, as recorded by interviewers, are reproduced below. They indicate the wide variety of answers given, from the moderate and carefully considered to the extreme and impulsive. Although a few of them were given in similar form by more than one informant, no quotation can be considered "typical" of any particular fraction of the bar. The only things

TABLE 6-6
*Views of Lawyers for Claimants
 on Claim-Handling Problems*

<i>(percentage distribution of responses in court cases)</i>	
<i>Whether there are any major problems in the way auto injury cases are handled in Michigan^a</i>	<i>Percent of cases</i>
No	15%
Yes	129 ^b
Delay in the courts	30
Attitudes and practices of insurance companies	28
Attitudes and practices of claimants' lawyers	9
Inadequate compensation for claimant; specific mention of financial responsibility laws or compulsory insurance, or of precedent for valuation of the loss of a minor child	24
Jury system is inadequate	11
Problems relating to expert witnesses	7
Other problems	20
Not ascertained	5
Total	149% ^b
Number of interviews	149

^a The question was: "On the basis of your experience, do you feel that there are any major problems in the way auto injury cases are handled in Michigan? How would you suggest these problems be reduced?"

^b Columns add to more than 100% because some lawyers mentioned more than one problem.

that can be considered typical are views as to what are the major problem areas, such as "delay," "attitudes and practices of insurance companies," and "inadequacy of compensation," on which significant percentages of the sample concurred.

One must always remember, too, the characteristics of the sample whose views are typified, and the fact that their views were expressed in the context of a case in which they had worked to obtain maximum compensation for an injured person. Under these circumstances it is not surprising that 28 percent complained

of insurance companies; it may be surprising that the percentage was not higher.

The quotations have been selected with a view to indicating the whole range of opinions expressed, without regard to the fairness of the statement or the qualifications of the informant. However, one group of answers—those relating to delay in the courts—are omitted here and presented in the following chapter in connection with other evidence on time intervals between injury and settlement.

Quotations citing attitudes and practices of insurance companies
(28 percent)

"The award or settlement offers by insurance [companies] are inadequate."

"Insurance companies refuse to make any adequate offers at all, forcing us to file suit in many cases that should have been settled immediately."

"Insurance companies try to settle on a formula of actual costs, which forces us to go into court."

"[There] ought to be more of an attempt to settle cases promptly. Insurance companies cause the time loss. Make Michigan Department of Insurance compel the insurance companies to act in good faith."

"Poorly trained adjusters. [The companies should] pay them more, train them better, give them more authority."

"Claims departments should be fair and honest. [There is] no reason for this suit. More efficiency in claims departments would result in fewer law suits."

"The attitude of insurance companies is unduly influenced by fake claims sometimes filed. Insurance companies should be more liberal in bona fide cases, and if they aren't then the legislature should enact legislation."

"Trying to negotiate with insurance company: they start with a rule of thumb that it is a matter of compromise. You can't be

honest about it. The lawyer must ask for much more than the case is worth. [It would be better] if the insurance adjuster would take a realistic view toward the case, as well as the plaintiff."

"When people are injured and in hospitals, no one should be able to approach him and get statements—often [while person is] in shock, and phrased so as to benefit insurance company."

"There is a definite program to let [the] public think that insurance premiums are based on the huge settlements paid out in accident cases. That isn't so. They are grafters of the first order. They charge premiums and try to chisel out of paying. I'd like the University to make a study of these institutions and show the public."

Quotations citing inadequacy of compensation for claimants (24 percent)

"The small claims are difficult and expensive, and [the] whole system is a tragic failure. If claimant wins he is still a loser—by the time [he] pays legal expense and his loss of time he cannot come out with just compensation. Cost of prosecuting claims has become so expensive."

"The claimants have to pay attorneys out of what they get and they are being short-changed. I feel the [insurance] companies should have to pay attorneys' fees in addition to the amount of the verdict."

"We should see to it that the claimant gets the full amount of the judgment. We should have a judgment creditors' pool to take care of cases like this."

"In the first place the concept of fault is a 19th century concept that has been outmoded. By that I mean that the concept of fault is ridiculous. That's why I'm in favor of the workmen's compensation system. Also these [personal injury] cases are based on the skill of the lawyer. Should be based on disability rather than the charm of a lawyer to the jurors."

—specific mention of commission plan

"[Auto injuries] will eventually come under a system of schedule of benefits somewhat similar to workmen's compensation, because of the indefinite nature of some injuries, e.g., whiplash."

"I don't think they should handle auto injury cases the same as workmen's compensation cases."

"Putting [cases] before [a] panel is not the answer. Workmen's compensation compensates the employee if hurt on job whether negligence [is shown] or not; [this is] not true of accident case suits for injury. In other cases, these people have always had a right to a trial by jury; [a compensation plan] would take away their constitutional right for jury trial."

"I certainly do oppose a compensation plan for auto accidents. To have it handled by the state would be worse than ever as seen by workmen's compensation. People [would] not [be] paid because of lack of funds which legislature failed to provide because of politics."

"I advocate compulsory insurance. Also a board similar to the workmen's compensation board."

Quotations citing inadequacy of jury system (11 percent)

"[People are] dissatisfied with way various juries evaluate various injuries. One case tried in one term of court may be worth more or maybe less in another term of court."

"[There should be] fewer jury trials; you never know what a jury will do as they are swayed by emotions."

"The verdicts are getting out of proportion because juries know that most people are insured. I don't think women should be on juries—they are usually housewives who do not have any contact with business and are not aware of points of law. I think we should pick a better caliber jury panel of informed, intelligent people who have contact with the business world."

"Often the jury lacks knowledge to be able to consider expert testimony by witnesses."

"[Should] change law so judge can instruct jury on merits in the case."

"Quality of jurors could be improved. [Should] break down court jargon to lay terms."

"There should be some limitations placed on the amounts a jury is permitted to award for the value of a life, and for pain and suffering."

"Most severe problem is to have cases properly presented in court so judge and jury see both sides completely; not covered by just one side. Procedure and rules of evidence should be changed. Also people feel insurance companies are wealthy and should pay regardless of legal liability. Juries love to give insurance companies' money away."

Quotations citing attitudes and practices of claimants' lawyers (9 percent)

"We need better trained lawyers. More specialization in fields such as this [personal injury litigation]."

"Some plaintiffs' attorneys reach too far; particularly the younger ones."

"Some lawyers will over-estimate the amount the claim should amount to in order to get a larger fee if possible."

"There seems to be more greed among the attorneys in Michigan. [There should be] less competition among the attorneys, and they should charge more realistic prices."

"The trouble is that the lawyers do not always work on a case as well as they should. Some are out to make a fast buck and don't spend enough time to work up a case."

"One of the worst features is ambulance chasing by lawyers. Many lawyers for plaintiffs are exaggerating facts. There should also be greater communications between plaintiffs and their lawyers so that plaintiff knows at all times what the lawyer is going to do."

"There is a lot of litigation on whiplash cases where the lawyer contributes to the client's misery by calling him everyday asking how he feels. Client feels pain because the lawyer wants him to feel it."

Quotations citing problems relating to expert witnesses (7 percent)

"Big problem could be reduced if doctors would be honest in evaluation of injuries particularly insurance company doctors."

"High cost of expert witnesses."

"Should be able to compensate witnesses adequately."

"Expert witness fees should be specified by court at end of trial and make it a criminal offense to pay more."

"Great difficulty in getting doctors into court to testify. Continuation of efforts of bar to inform medical profession of our problems. Passage of a statute authorizing payment of witness fees to doctor prior to his appearance in court—said fees to be between \$50 and \$100 minimum."

Quotations citing other problems (20 percent)

—*contributory negligence*

"Contributory negligence is hard to prove."

"Yes, a fair legal definition of 'fault.' We have a contributory negligence statute which definitely needs to be repealed, in my opinion. Also the guest statute is unfair."

"I don't think the question of contributory negligence should be resolved solely by jury. I think that we should be able to get a directed verdict."

—*comparative negligence*

"Need comparative rather than contributory negligence law."

"Would like a better comparative negligence liability law."

"A comparative negligence rule should be adopted. It would simplify litigation."

"Basic legal problem in Michigan—a contributory negligence

state—1 percent of neglect would bar his recovery even though defendant is 99 percent responsible. Comparative practice in Dakotas more satisfactory. It would reduce plaintiff's recovery to his intelligent proportion. Comparative insurance identical to admiralty law. Much more satisfactory."

—*mention of insurance*

"Attorney is not allowed to advise a jury that there is insurance. Juries often conclude there is no insurance and then allow their sympathy for the defendant's financial plight to influence their verdict."

"The Wisconsin rule permitting mention of insurance and the name of insurance carrier is far better than to let the jury guess and guess wrong. Have to be very careful not to mention the word insurance in Michigan trial."

—*miscellaneous subjects* (mentioned in only a single interview)

"Basic problem is finding a sound basis for reaching a sound evaluation of damages."

"A more active pre-trial arrangement for stipulation purposes prior to trial."

"Police, at scene of accident, should check mechanical failures, skid marks, and should take photos of accident."

"I represent more defendants than plaintiffs. In this field the decisions of the State supreme court are too liberal. It has gotten to be a giveaway program."

"The law is heavily weighed with technicalities which tend to favor defendants."

"More people should tell the truth. You get somebody up there who starts telling how much they suffered since the accident and the first thing you know the jury is all teary."

CHAPTER 7

Automobile Injury Cases in the Courts

Of the eighty-six odd thousands of persons who sustained economic loss in reported Michigan automobile personal injury accidents in 1958, about one-twentieth (4000) eventually filed suit. A majority of these cases involved serious injuries; they have already entered into the reports of serious injury cases (along with other serious injuries which were not sued on) in Chapters 5 and 6.

But it would be useful to know something about suit cases as a separate group, including the "minor injury" cases which get into court. That is the subject of the present chapter. In order to get information on suit cases, a sample of automobile injury suits filed in 1957 was drawn from the calendars of a representative group of Michigan courts. The Michigan state circuit courts of twenty-one counties, plus the federal district courts sitting in Michigan, and the Kent County Superior Court, supplied the sample.

A. WHAT KINDS OF CASES GET TO COURT?

As anyone would expect, the cases which get to court are predominantly the ones with the more serious injuries and the greater economic losses. Under the rather arbitrary tests adopted by the survey, about one-eighth of all the personal injury accident victims (10,200 out of 86,100) sustained "serious" injuries; the injuries of the other seven-eighths were "minor." But among the suit cases, almost exactly two-thirds of the injuries were "serious," and one-third were "minor." Looking at the problem from the opposite direction, we may observe that of the serious injury victims about 27 percent eventually filed suit; of the minor injury victims, about 2 percent filed suit.

A more precise observation on the tendency of different kinds of cases to go to court can be gained by separating them into classes by the amount of economic loss, and observing what proportion of each class goes to court. In cases where economic loss was less than \$500, only about one of a hundred went to court. In the cases where the loss ranged between \$500 and \$3000, the proportion going to court was about one in fifteen. The proportion rose with higher loss brackets until it reached a peak of 60 percent of the injuries being sued on where the economic loss was between \$10,000 and \$25,000. The distribution is shown in Figure 7-1.

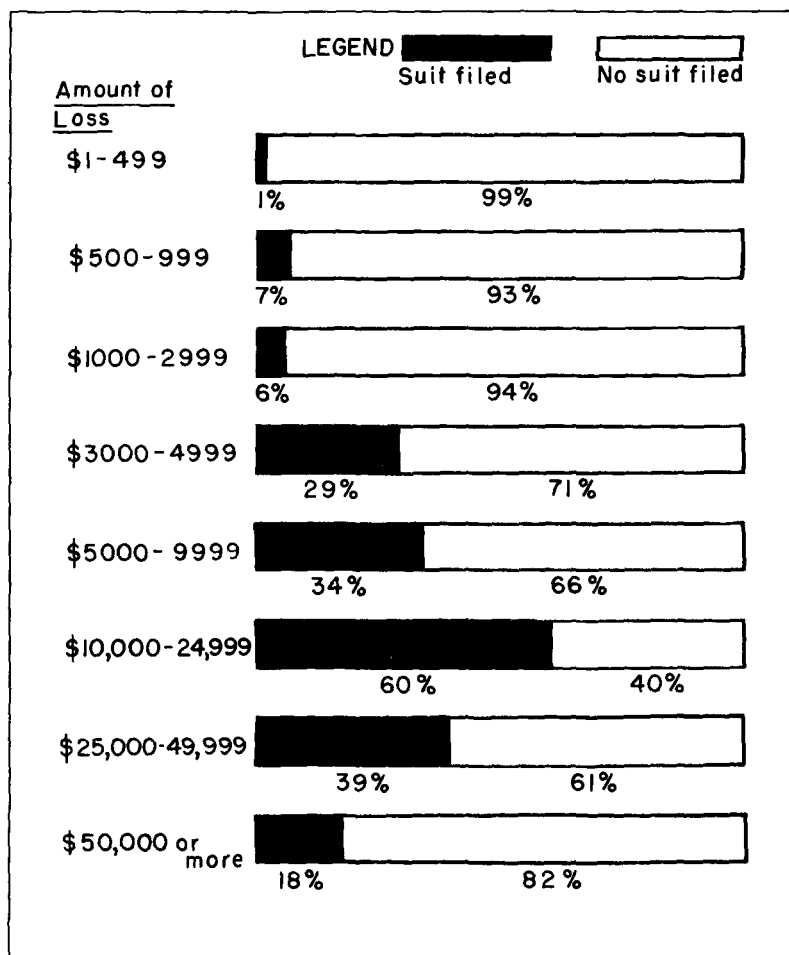
There is one curious aspect of this distribution. That is the fact that the proportion of suits dropped as the amount of economic loss rose above \$25,000. Indeed, the proportion of suits for losses above \$50,000 was lower than for losses between \$3000 and \$5000.

A possible explanation for this phenomenon may be suggested consistently with other findings of the study. Probably a principal reason for a suit's being filed is a difference of opinion between the parties as to the amount which the defendant may be forced to pay; if the gap between their estimates is greater than the cost of litigating, litigation is likely to occur. In large loss cases, the gap shrinks. A minimum amount is set by out of pocket expense; a maximum is set by the insurance coverage. The difference in *amounts* disappears, thus eliminating a major cause of suit.

According to this hypothesis, a claimant who has lost \$100,000 worth of earning power knows perfectly well that the defendant cannot pay more than, say, \$10,000 from his insurance, and \$5000 from his individual property. At the same time, the defendant's counsel knows perfectly well that the judge or jury is not going to place damages below \$15,000. Therefore, the usual uncertainty about the amount which might be collected is absent; the only uncertainty is on the question of liability. With diminished uncertainty, there are more settlements without suit.

This hypothesis is given support from data presented in Chapter 6. In discussing the bargaining process, initial offers of settlement were compared with the final tort settlement. In those cases in

FIGURE 7-1—FREQUENCY OF SUIT IN CASES WITH VARYING AMOUNTS OF ECONOMIC LOSS
(Percentage distribution of personal injury accident cases)



Number of questionnaires providing this information: 1421, 149, 601, 63, 37, 39, 50, 34.

which the amounts of economic loss were highest, the injured party was most likely to have received an offer of settlement that exceeded the final tort settlement (Figure 6-20).

B. IN WHICH COURT FILED?

Because of the well-known congestion of city courts as compared with rural ones, the survey attempted to determine to what extent this may be caused by the migration of cases from rural to urban counties for purposes of suit. The tabulation showed that the proportion of suits filed in urban counties was slightly higher than the proportion of accidents occurring in these counties. But the difference was minor, and within the limits of probable error of the survey itself. Table 7-1 compares the distributions.

TABLE 7-1

*Urbanization of Counties in Which Accidents Occurred
and in Which Suits Were Filed
(percentage distribution of cases filed in circuit courts)^a*

<i>Degree of urbanization (per cent of county population living in incorporated places)</i>	<i>County in which accident occurred</i>	<i>County in which suit was filed</i>
Rural (0-50%)	21%	18%
Intermediate (51-75%)	38%	36%
Urban (76-100%)	41%	46%
	100%	100%
Number of records	106	106

^a Federal court cases were excluded, since the location of these courts virtually compels migration from more rural to more urban counties.

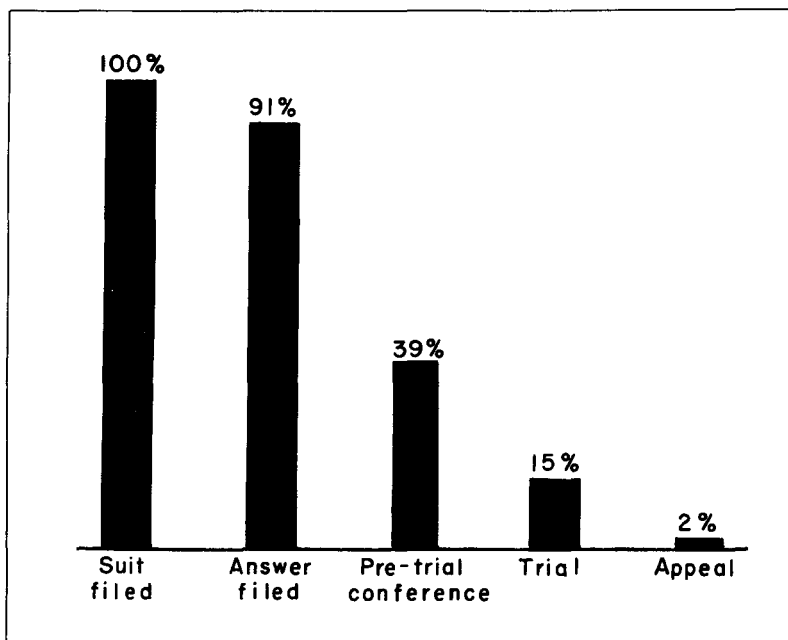
C. STAGES OF LITIGATION

Of the approximately 4000 cases on which suit was filed, very few went the whole distance to trial—much less to appeal. About 9 percent of the cases filed were dropped or settled without even

the filing of an answer. After issue had been joined, another 52 percent were terminated without coming to trial or even a pre-trial conference. Another 24 percent were terminated at or after the pretrial conference, leaving only 15 percent of the original group to go on to trial. At or after trial, 13 percent more were terminated, so that about 2 percent went on to the ultimate stage of litigation, an appeal to a higher court.* Figure 7-2 indicates the number of cases reaching various stages.

There were interesting differences between the serious and the

FIGURE 7-2—STAGES OF LITIGATION REACHED IN SUIT CASES
(Percent of all suit cases, excluding cases still open)



Basis: The first four columns are based on 295 court records. The fifth column is based on a separate case count of Supreme Court reports.

* These percentages are not completely consistent with the relative number of cases sued on and tried as indicated in Figure 4-3. Since that table reported amounts of settlement, it was estimated from cases in which settlement results were available. The present calculation includes cases for which settlement information was unavailable, and is more accurate with regard to litigation stages.

minor injury cases in relation to stages of litigation. Although 9 percent of all suit cases terminated without an answer being filed, nearly all of these were in the "minor injury" group, of which 24 percent were terminated without answer; this occurred to only 1 percent of the serious injury cases. It is reasonable to assume that the minor injury suits were simply ways of testing the intentions of defendant's counsel. Probably a settlement was forthcoming when suit was filed; if not, the claimant's lawyer did not think the case was worth pushing further.

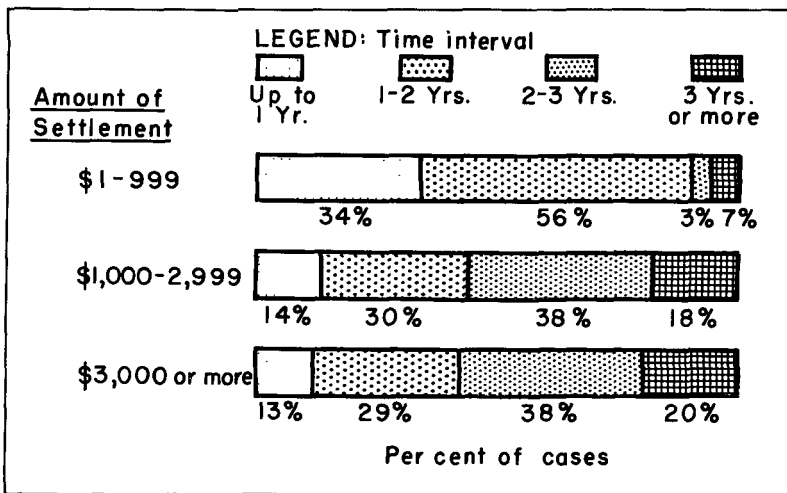
There was also an important difference at the trial stage. Of the cases falling within the sample which went to trial, not one was a "minor injury" case. Since the sample was small, it is quite possible that a larger sample would show a few minor injury cases going to trial, but the number would be a very small proportion of all cases on which suit had been filed.

The small number of cases going on to appeal prompts some interesting observations. The law of torts as it is written in books, debated in law review articles, and taught in law schools, is based on those cases which are "appealed." These represent only 2 percent of all the cases on which suit is filed, and about one-tenth of one percent of the total number of persons suffering economic loss in personal injury automobile accidents. What a small view of what a large universe!

D. TIME LAGS IN SETTLEMENTS

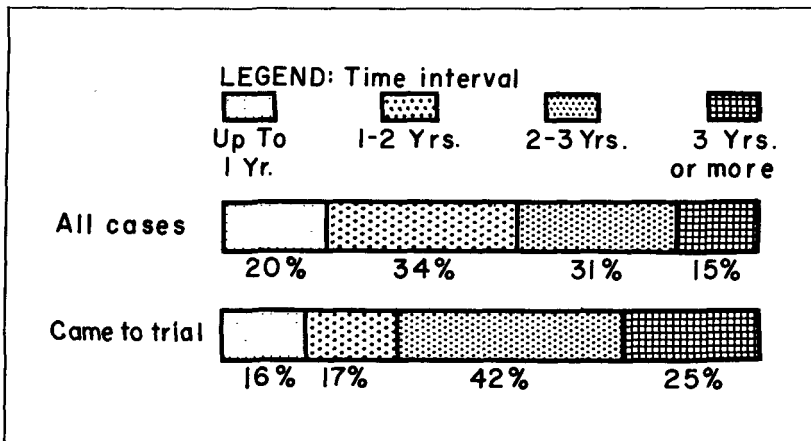
Claimants in the suit cases generally waited a long time for their settlements; the majority of cases were settled from one to three years after the accident took place. Smaller settlements were generally obtained more promptly; Figure 7-3 shows the distribution, classified by size of settlement. The figure does not show the time intervals for extremely large settlements, which were too few for significant analysis. But it may be interesting, even if not

FIGURE 7-3—TIME FROM INJURY TO SETTLEMENT IN SUIT CASES FOR VARYING AMOUNTS OF SETTLEMENT
(Percentage distribution of suit cases in which a tort settlement was obtained)



Number of interviews providing this information: 19, 32, 52.

FIGURE 7-4—TIME FROM INJURY TO SETTLEMENT IN CASES THAT CAME TO TRIAL COMPARED WITH ALL SUIT CASES
(Percentage distribution of suit cases in which a settlement was obtained)



Number of interviews providing this information: 109, 16.

statistically definitive, that of three settlements for over \$25,000, one came after three years, and the other two after five years.

Naturally, the proportion of long-lived cases was higher among those which went to trial than among the entire group of suit cases. This is shown in Figure 7-4.

But the difference between the tried cases and the entire group is perhaps less striking than the lack of difference. Sixteen percent of the cases tried were settled within a year of the original accident; some (not separately shown on the chart) were even reported settled, after trial, within six months. This suggests that trial is not always and inevitably a delaying factor.

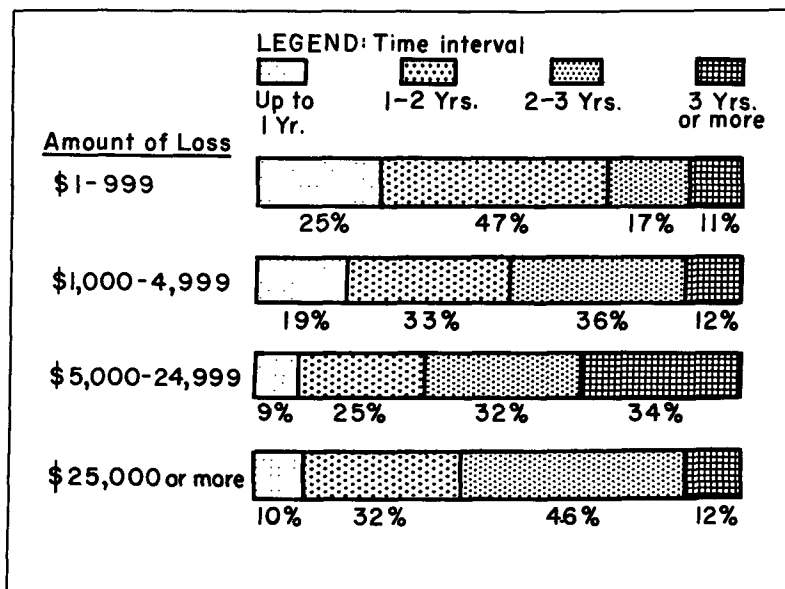
Another factor which showed an interesting correlation with the time from injury to settlement was the amount of economic loss. Cases with small losses (under \$1000) were most promptly settled; a quarter of them were settled within a year, and nearly three quarters within two years. In the next larger bracket (\$1000 to \$5000), the proportion settled within a year dropped to a fifth, and the fraction settled within two years dropped to about half. In the "large loss" bracket (\$5000 to \$25,000) less than a tenth were settled within a year, and barely a third within two years. In short, the greater the loss, the slower the settlement. Figure 7-5 illustrates the progression.

The chart shows one curious factor about the progression; this is the fact that in the very largest bracket of losses (over \$25,000) the time intervals were no longer than in the next smaller bracket; in fact, they were shorter. In view of the small number of cases in the large loss group, the distribution is not highly definitive. But it is quite likely that settlements are quicker, for the same reasons, previously discussed, which make suits less frequent.

E. CLAIMANTS' LAWYERS' VIEWS ON DELAY

Claimants' lawyers were asked, in personal interviews, what they thought were the principal problems, if any, in the way

FIGURE 7-5—TIME FROM INJURY TO SETTLEMENT IN CASES OF VARYING ECONOMIC LOSS
(Percentage distribution of suit cases in which a settlement was obtained)



Number of interviews providing this information: 19, 46, 28, 13.

personal injury claims are handled in Michigan. They were subsequently asked specifically what they thought about the problem of delay.

Delay was clearly a paramount problem in many lawyers' eyes. Claimants' lawyers were asked, "On the basis of your experience, do you feel that there are any major problems in the way auto injury cases are handled in Michigan?" Thirty percent spontaneously named delay as a problem. No other single factor received as many spontaneous mentions, although it was closely followed by "attitudes and practices of insurance companies."

Even so, the opinion was not unanimous. When (in a later question) lawyers were asked specifically about delay, only 51 percent affirmed that it is a problem, and 26 percent categorically

denied it. Illustrative of the negative view was a lawyer who answered, "Actually there are not delays. It takes a long time to investigate a case thoroughly, round up witnesses, prepare papers. What appears to be delay is not; they are the time-consuming mechanics of preparing the case." Another said, more briefly, "This has been overstated. Clients have not been hurt. It takes one good year to know a client's injuries." One lawyer even saw merits in delay. "Some delay is good for both sides. Cases prematurely brought to trial are not properly tried. It encourages settlement so I don't object too much. Could be cut a little, but not too much."

Among the intermediate views were a number which said, "It may be a problem somewhere, but not in this county," or words of like effect. One lawyer observed, "[Delay] evens itself off. For one side or the other the time element might become a factor in settling the case, but works for the defendant at times and the plaintiff [at other times]."

But the dominant note among claimants' lawyers was one of grave concern about delay. Several lawyers regarded it as a weapon of the defense. A typical answer said, "Delays and the passage of time work to the benefit of the defendant—he delays until you are broke and have to settle." Another response was, "The fact that many people have to have their money for bills makes many cases become settled in an unfair way."

A number of causes of delay were cited. Some lawyers blamed the conduct of injury victims. "People don't consult lawyers in time, [and] the defense is given an advantage. The insurance companies are out in two weeks and know all about the accident." "People do not retain lawyers soon enough after the accident. Witnesses get lost. People forget things."

Reasons for the injury victims' delays were also offered. One lawyer said, "Many prospective claimants are not aware of their legal rights. Also, a lot of people have the idea that lawyers charge too much and are reluctant to see one." Another lawyer observed,

"People are frightened of lawyers. If they could get over that, it would help."

Some claimants' lawyers blamed insurance companies and their lawyers for delays. "Certain lawyers and insurance companies know of this long wait [i.e., for trial] and will not discuss the case until about one week before trial—hoping people will take less, or die, or witnesses will die." "Out of the vast number of cases started, few get to trial. In the meantime there is no desire to settle cases by defense attorneys. They figure they can sit by for a year after [suit is] filed." "Some cases I have sitting for 18 months [with] no notice of pre-trial. You can't remember everything about pain for two years."

But the accusing finger was most frequently pointed at the courts as the cause of delay. Many lawyers thought there were not enough judges, but others thought the judges weren't working hard enough. "[There is] difficulty in getting some cases to trial. Some judges aren't working. It takes four months to get to trial." "The judges are crying that they are overworked, but if they worked a full day, you wouldn't have that problem." "Judges aren't working as hard as they should. [They] waste too much time in court."

A few lawyers took pains to say that the fault was not in the courts. "I believe the insurance companies do more holding up of cases than do the courts." "If [there are] any undue delays, [they] would be the fault of attorneys rather than of the courts." "Courts have a reluctance to call juries in the summer because in this area farmers are very busy."

Many lawyers had given thought to measures which might shorten the delays now current. The remedy most frequently mentioned, or implied, was an increase in the number of judges. "The only place where there is any major delay is ——— County, where there is an insufficient number of judges." "An overworked judge is not desirable." One lawyer, while agreeing with this

prescription, observed that judges should also work harder: "More judges, but more diligence."

A number of structural changes in the administration of justice were suggested. One lawyer, in a context of a complaint about long waits for trial, suggested a "commission system" without explaining how this would help except that it would "avoid starting lawsuits." Another lawyer thought that "referees should be appointed to take the burden off the judge." A third suggested, "Maybe a separate court—eliminate juries—a three-man court . . . who would specialize in negligence work." A curious ambivalence was demonstrated by one lawyer who said, "The answer is more judges, or—no, the answer is judges working more than they do."

A few lawyers saw a remedy in a different direction. "People need to be educated on what to do in these accidents." "There should be more education of the public, informing them, on behalf of the bar association, as to what their rights are in an accident." These answers presumably referred to reducing the delays which occur between the accident and the consultation of a lawyer.

A tabulation of the answers on delay is presented in Table 7-2.

F. RATIOS OF SETTLEMENTS TO ECONOMIC LOSS

In each suit case, the injury victim's economic loss was estimated and compared with the net amount received after deducting the claimant's collection expenses. This is the same analysis made in Chapter 6, Sections D and E, and the explanations made there are applicable here. The analysis is repeated for suit cases partly in order to see whether the same patterns of high reparation for small losses and the low reparation for high losses prevail when suit cases are segregated. A second objective is to furnish data which are relevant to the many studies which have been made, or are likely to be made, of automobile injury cases in the courts.

The distribution of settlement-to-loss ratios for the entire group of suit cases contains no surprises; all brackets are well represented.

TABLE 7-2

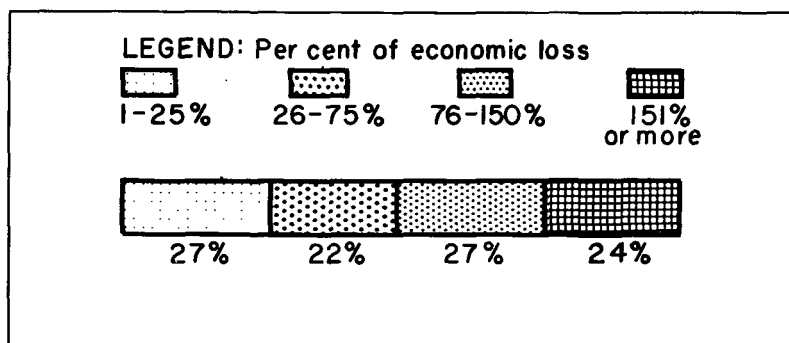
Claimants' Lawyers' Views on Delay^a
(percentage distribution of responses in suit cases)

<i>There is no delay or no problem</i>		<i>All cases</i> 26%
<i>Pro-con answers</i>		18
Delay often benefits claimant (need time to determine full extent of injuries, or to collect evidence and prepare case)	8	
Delay is limited to certain courts and/or counties	9	
Other pro-con answers	1	
<i>There is a problem of delay</i>		51
Courts and/or judges cause delay; need more courts and judges	31	
Defense attorneys and/or insurance adjusters cause delay	7	
Plaintiffs' attorneys cause delay (often litigate unnecessarily)	3	
Other views, or other causes of delay	10	
<i>Not ascertained</i>		5
Total		100%
Number of interviews		149

^a The question was: "There has been a lot of talk about delay in the courts and how long it takes to get a jury trial—what are your views on this problem?"

Figure 7-6 is very much like Figure 6-12 in Chapter 6, which relates to serious injury cases (both suit and no-suit). The principal difference emerging is that in the suit group there was a significantly larger number of cases in which more than 150 percent of economic loss was recovered. It seems likely that the difference is attributable to the inclusion of some "minor" injury cases, since it has already been shown that the smaller losses were more likely to be generously compensated (Chapter 6, Figure 6-14).

FIGURE 7-6—NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS
(Percentage distribution of suit cases in which a settlement was obtained)

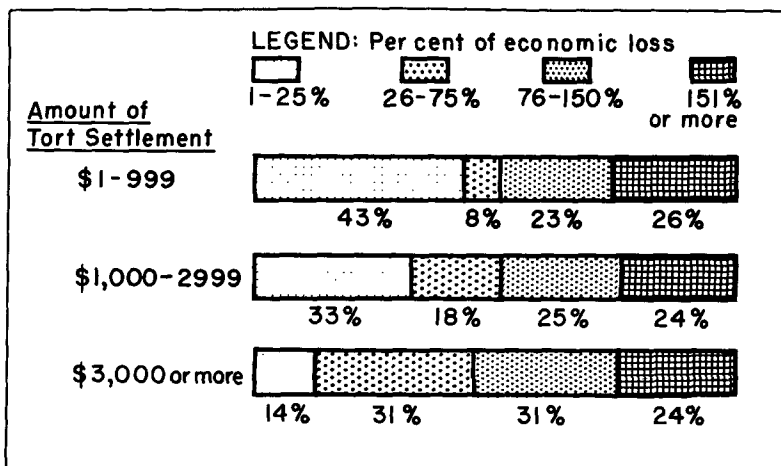


Number of interviews providing this information: 97.

When settlements are divided into different orders of magnitude, a much more interesting pattern develops (Figure 7-7). One block has grown out of proportion to the others; that is, the small settlements which are also small fractions of economic loss (43 percent). This means that an inordinately large fraction of the under \$1000 settlements are settlements for a very small fraction of the economic loss. These may be what defendants' attorneys would call "nuisance settlements" (see Chapter 6, Section H, *supra*). Whatever the phenomenon is called, it is not peculiar to suit cases; it appears also in the "serious injury" group, which included no-suit cases (see Figure 6-13 in the preceding chapter); but it seems to be slightly more pronounced in the suit cases, which would be consistent with the "nuisance settlement" hypothesis.

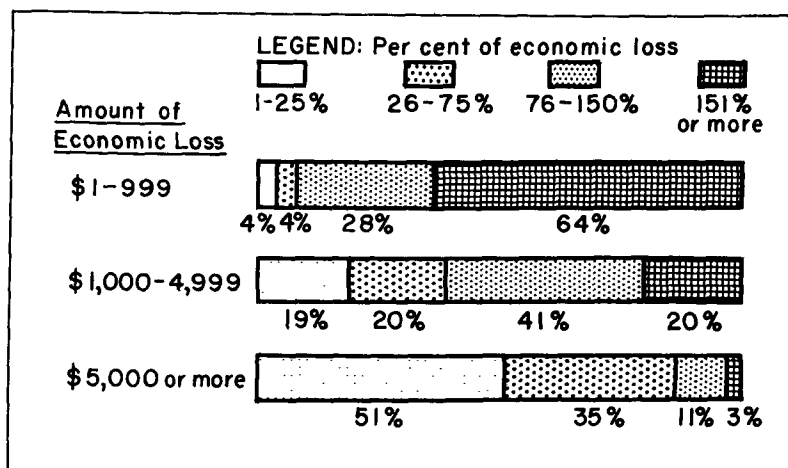
More light on who gets generously compensated and who does not is gained when the cases are divided by amounts of economic loss which the injury victims have sustained. Among those with small losses (under \$1000), nearly two-thirds received substantially more dollars than they lost. But among those with losses of over \$5000, less than 5 percent were so fortunate (Figure 7-8).

FIGURE 7-7—NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS IN SETTLEMENTS OF VARYING AMOUNTS
(Percentage distribution of suit cases in which a settlement was obtained)



Number of interviews providing this information: 18, 29, 50.

FIGURE 7-8—NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS IN CASES WITH VARYING AMOUNTS OF LOSS
(Percentage distribution of suit cases in which a settlement was obtained)

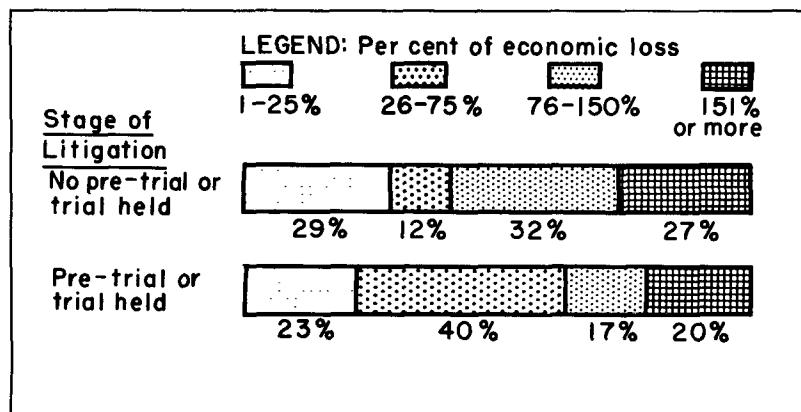


Number of interviews providing this information: 18, 39, 40.

Among the victims with losses of over \$25,000, of whom there were not enough to justify a distribution, none were found to receive more than half of their economic losses.

A division of the cases by stage of litigation presents an interesting picture in that the ratios of settlement to economic loss are somewhat lower in the cases which came to pretrial or trial than in those which were settled at earlier stages (Figure 7-9).

FIGURE 7-9—NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS IN CASES TERMINATED AT VARIOUS STAGES OF LITIGATION
(Percentage distribution of suit cases in which a settlement was obtained)



Number of interviews providing this information: 57, 40.

G. AUTOMOBILE INJURY CASES IN THE JUDICIAL WORKLOAD

The delay in getting to trial in personal injury cases was attributed by many lawyers to the imbalance between the work which the judges have to do and the amount of work which they actually do. Whether this imbalance is due to the insufficiency of judges' numbers or of their diligence, it is clear that it might be relieved if the workload were smaller. This leads to the question whether the automobile personal injury cases themselves are major contributors to the workload, and are thus the causes of the delays from which they themselves suffer.

A definitive analysis of this problem would require a study of Michigan judges' work time, which has not been made.* However, it was found possible to measure the number of cases involving automobile injuries at various stages of the judicial process. For purposes of the study, automobile injury cases were measured as a fraction of the total civil case load, including chancery cases.†

The first stage of the judicial process is filing suit, usually accomplished in Michigan by the issuance of a summons. In 1957, automobile personal injury cases comprised only about 8 percent of the civil cases filed in Michigan civil courts. They were greatly outnumbered by divorce cases filed (48 percent).

After the issuance of summons, which is almost invariably followed by the filing of a complaint, the next decisive step is the filing of an answer, indicating that the defendant disputes the charges in the complaint. When the answer has been filed, the case is said to be "at issue."

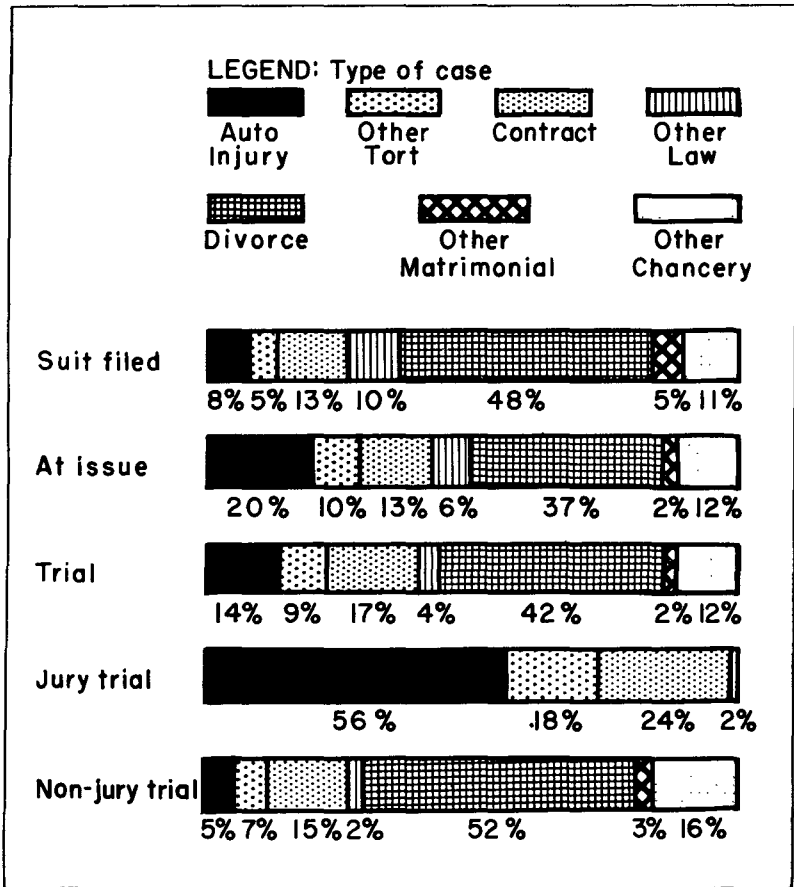
Different kinds of cases differ greatly in the frequency with which they come to issue. The divorce and other matrimonial cases are the group in which it is most common to find that issue has never been joined. On the other hand, answers are almost always filed in tort cases, including automobile personal injury suits. Consequently, the automobile personal injury share of the load of cases "at issue" jumped to 20 percent (against 8 percent of cases filed) while divorce cases dropped to 37 percent (against 48 percent of cases filed).

Not all the cases which come to issue go on to trial; many are settled. Here a reversal of form is encountered; although auto-

* A study of the expenditure of judicial time on various types of cases in federal courts is reported in Annual Report of the Administrative Office of U.S. Courts, 1960 (Washington, 1961), pp. 148, 154-56, 157, 349.

† This report does not separate law and chancery cases, although it would be possible to do so. No such separation is made in the Annual Report of the Judicial Conference, State of New York, or in the U.S. Court Administrator's report. Whereas prior Michigan law distinguished between law and equity proceedings (Mich.Comp.L. 1948, § 611.1, M.S.A. § 27.651) rule 12 of the new Michigan General Court Rules of 1963 provides for only a single form of civil action.

FIGURE 7-10—AUTOMOBILE INJURY SUITS IN THE COURTS' CASE LOAD AT VARIOUS STAGES OF LITIGATION AND BY TYPE OF TRIAL (Percentage distribution of civil cases in Michigan Circuit Courts)



mobile personal injury cases are among the most likely to come to issue, they are also rather likely to be settled before trial. These cases shrank from 20 percent share of the cases at issue to 14 percent share of the cases tried.

But this is not the whole story. There are two kinds of trial—

jury and nonjury, and the jury trial is the one that is notorious for its longer duration. The automobile injury cases constituted a whopping 56 percent of the jury trials, although only 5 percent of the nonjury trials.

A comparison of automobile injury cases with others at various stages of litigation is presented in Figure 7-10.

CHAPTER 8

Attitudes and Opinions of Claimants and Defendants

INTRODUCTION

The typical individual involved in a serious personal-injury automobile accident finds himself thrust into a situation which he did not anticipate and for which he has had little prior experience on which to base decisions. If the injury is a serious one, the individual is aware that the eventual outcome of the case may have a profound impact not only on his own future, but on the future of his family as well. He is suddenly faced with a great deal of uncertainty—uncertainty which must be resolved by making decisions which will lead to final settlement of the case, and often to some adjustment in the pre-accident goals of the individual and his family. To aid in making the required decisions, solicited and unsolicited advice is generally available from his own family, friends, fellow workers, community groups, and, of course, members of the insurance and legal professions.

Decisions that must frequently be made in the process of settling a personal-injury automobile case include whether or not to hire a lawyer, how the particular lawyer should be chosen, whether resort should be made to tort litigation, whether an offer to settle should be accepted, and many others. This chapter examines the factors that influenced these decisions and the respondents' subsequent satisfaction or dissatisfaction with the decisions that were made.

In addition to specific aspects of his own case, each personal-interview respondent was asked some relatively general attitudinal questions concerning selected characteristics of the tort system. A large majority of these respondents, who were selected by reason of the seriousness of their injuries, had been recently exposed to

the tort settlement process. Hence, it would be expected that their attitudes and opinions would be held with more conviction than would those of a typical cross-section of all Michigan residents, and, further, that these attitudes and opinions would have a correspondingly strong influence on their future behavior. Just as products have "images" which strongly influence buying behavior, so do individual lawyers, law firms, and legal systems have images which affect the behavior of their "consumers." Whether or not these images or attitudes are correct, people will behave in accordance with them.

For analysis purposes, respondents have been classified into the following four groups: (1) seriously injured claimants who did not file suit, (2) seriously injured claimants who filed suit, (3) claimants with minor injuries who nevertheless filed suit, and (4) defendants. These groups will be looked at separately, and also in comparison with other groups. The chapter concludes with a discussion of basic "hostility" as a factor in the behavior and attitudes of accident victims.

A. BACKGROUND FACTORS

1. *Demographic Characteristics of Claimants*

Before discussing specific decisions made by claimants, the demographic characteristics of the three major subgroups are compared (Table 8-1). Major differences in demographic characteristics established here should be kept in mind when evaluating factors influencing the specific decisions reached.

In general, the three injury groups are demographically quite similar, although a number of minor differences should be noted. First, seriously injured individuals who did not file a suit tend to have lower incomes and are more likely to be in nonprofessional occupations. However, in terms of education, race, and religion, they are relatively similar to the seriously injured who did file a suit. Plaintiffs with minor injuries are quite similar demographically to those with serious injuries, although those with minor

injuries include a slightly higher percentage of nonwhites and younger persons, and a slightly lower percentage of Roman Catholics.

TABLE 8-1

*Demographic Characteristics of Personal-Interview Respondents
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Characteristics of personal-interview respondents</i>	<i>Extent of injury and whether suit filed</i>			
	<i>All cases</i>	<i>Serious injury Suit not filed</i>	<i>Minor injury Suit filed</i>	<i>Suit filed</i>
<i>Family income</i>				
Less than \$3000	21%	25%	17%	13%
\$3000—4999	21	20	22	24
\$5000—7499	30	26	35	36
\$7500—9999	16	17	15	15
\$10,000 or more	12	12	11	12
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Occupation</i>				
Professionals and self- employed businessmen	19%	13%	27%	29%
Clerical and sales personnel	11	11	14	2
Craftsmen and foremen	23	21	26	25
Laborers and service workers (including farm laborers)	11	12	11	9
Farm operators and farm managers	1	1	0	2
Not employed (e.g., retired, disabled, housewife, student)	35	42	22	33
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Education</i>				
0—8 grades	23%	24%	20%	24%
Some high school	62	60	66	65
Some college	15	16	14	11
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Race</i>				
White	95%	93%	98%	93%
Nonwhite	5	7	2	7
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

TABLE 8-1 (con't.)

<i>Characteristics of personal interview respondents</i>	<i>Extent of injury and whether suit filed</i>			
	<i>All cases</i>	<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
<i>Religion</i>				
Protestant	68%	70%	62%	73%
Roman Catholic	28	28	28	22
Jewish	1	0	2	5
Other	2	1	5	0
None	1	1	3	0
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Age</i>				
16—24	8%	9%	5%	11%
25—34	19	20	15	22
35—54	50	48	59	43
55—64	14	13	10	22
65 or older	9	10	11	2
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Percent of population living in incorporated cities and villages</i>				
0—50	21%	20%	24%	23%
51—75	43	47	34	45
76—100	36	33	42	32
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Sex</i>				
Male	49%	45%	54%	56%
Female	51	55	46	44
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
Number of interviews	378	228	116	34
Percent of cases	100%	61%	28%	11%

2. *Previous Experience with Automobile Accidents or with the Courts*

Another type of background variable which might influence decisions made in a particular case is the individual's previous

experience with either automobile accidents or the courts. Familiarity with the courts could have been acquired as a result of previous legal actions, or by having served either as a witness in a suit or as a jury member. Table 8-2 summarizes these data for personal-interview respondents.

TABLE 8-2

Accident or Litigation Experience of Personal-Interview Respondents Distributed by Claimant Groups (for all serious or litigated cases)

<i>Background characteristics of personal-interview respondents</i>	<i>All cases</i>	<i>Extent of present injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
<i>Whether respondent had been injured previously in an automobile accident</i>				
Injured previously	18%	17%	23%	14%
Not injured previously	82	83	77	86
	100%	100%	100%	100%
<i>If injured previously, whether a settlement had been received for personal injury^a</i>				
Settlement received	31%	35%	31%	0%
Settlement not received	69	65	69	100
	100%	100%	100%	100%
<i>Whether respondent had ever sued or been sued before</i>				
Had sued or been sued before	7%	6%	8%	10%
Had not sued or been sued before	93	94	92	90
	100%	100%	100%	100%

TABLE 8-2 (cont.)

<i>Background characteristics of personal-interview respondents</i>	<i>All cases</i>	<i>Extent of present injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Serious injury Suit filed</i>	<i>Minor injury; Suit filed</i>
<i>Whether respondent had ever been in court as a member of a jury or as a witness</i>				
Had served as a member of a jury or as a witness	15%	15%	15%	14%
Had not served as a member of a jury or as a witness	85	85	85	86
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
Number of interviews	378	228	116	34

^a N = 68 cases (the 18% of all respondents who had been injured in a previous accident).

In general, about 18 of each 100 respondents had been injured previously in an automobile accident, and about one third of this 18 percent had received a settlement. Seven out of each 100 respondents had had previous experience as either a plaintiff or a defendant, and 15 of each 100 had testified in court or served on a jury.

Looking at the subgroups, one notes that the mere fact of having been injured previously in an automobile accident does not appear to be related to whether or not a suit was filed in the present case. However, respondents with previous experience as either a plaintiff or a defendant were more likely to file a suit than those without such previous experience.

Previous success in collecting damages for injuries does not show any significant relation to present behavior in suing. Among the minor injury suitors in the present sample, there were none with prior success in collecting damages. Among the serious injury subjects, about a third had collected before; this proportion was

about the same among those who sued as among those who did not.

Previous experience as a witness or juror appeared in almost identical percentages among suitors and nonsuitors; it appears to be unrelated to the decision to sue or not sue.

B. OPINIONS AND ATTITUDES OF CLAIMANTS

1. *General Opinions and Attitudes toward The Tort System*

Before examining the survey results, it should again be noted that the data reported here cannot be used to make inferences about a "representative cross-section" of the Michigan population. These data are only for claimants who had been recently involved in a personal-injury case; about 58 percent of the respondents hired a lawyer, and 39 percent filed a suit. Their attitudes should be viewed in this context only.

When asked whether a person should sue whenever possible, or should attempt to reach settlement without filing a suit, only 16 percent of the respondents favored unqualified resort to litigation (Table 8-3). As would be expected, this figure is slightly higher for those who actually filed a suit, and within this group, slightly higher still for those whose suit involved only minor injuries. Seventy-seven percent of all respondents favored making every effort to settle without filing suit. A number of the specific answers to the question, "How do you feel in general about suing people—do you think people should sue whenever possible, or settle things without a suit, or what?", are listed below:

Respondent favored resort to tort litigation

Ans. "I think you should—no sense paying it out of your own pocket."

Ans. "When someone is hurt financially, they should sue."

Respondent would prefer to settle without filing a suit

Ans. "If they were in the right and someone [the responsible party] doesn't want to pay, then they'd have to sue, but I'd try to settle without a suit."

Ans. "Settle without a suit as often as possible. I believe if they are at fault they should pay medical bills and not push it off on the one that isn't at fault."

- Ans. "I would rather not sue if the other party would be reasonable."
 Ans. "If they can't get what they should have, then they should sue."
 Ans. "Settle things without a suit—unless somebody gets obstinate or something."
 Ans. "It takes too much money to sue. The average person can't afford to sue. Therefore you should settle without a suit."

TABLE 8-3

*Attitude Toward Suing
 Distributed by Claimant Groups
 (for all serious or litigated cases)*

<i>Attitude toward suing^a</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
Sue whenever possible; sue when cannot collect otherwise	16%	13%	17%	24%
Depends	7	7	7	11
Settle without suit if possible; always settle without suit	77	80	76	65
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
Number of interviews	378	228	116	34

^a The question was: "How do you feel in general about suing people—do you think people should sue whenever possible, or settle things without a suit, or what?"

Regarding the inclination to sue, one provocative result is seen in the relationship between race and attitude toward suing. None of the seriously injured nonwhite claimants expressed a preference to sue. Tentatively, one might hypothesize that a great deal of ambivalence exists toward this attitude (i.e., toward suing), which results in a conflict between a desire to maximize satisfaction both in terms of monetary recovery and punishing the other party, and a desire to avoid belligerence and a show of aggression. The nonwhite sample, representing somewhat different cultural backgrounds, and perhaps a marginal position in relation to the

dominant white community, would be expected to weigh this ambivalence differently.

When asked what should be done to make things easier for people who are in automobile accidents in the future (Table 8-4), enforced compulsory insurance was suggested by 33 percent of the respondents. Although compulsory insurance was the most frequent response to this question, 9 percent of the respondents wanted the reparation system revised in some manner that would reduce the time required to reach settlement and receive compensation. A smaller percentage of respondents suggested the establishment of a public advisory board; the group making this

TABLE 8-4

*Whether Anything Should Be Done to Make Things Easier
for People Involved in Automobile Accidents,
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Whether anything should be done to make things easier for individuals in automobile accidents^a</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
<i>No, nothing should be done</i>	26%	29%	18%	34%
<i>Yes, by reason:</i>	74	71	82	66
Enforced compulsory insurance	33	31	39	16
Public advisory board	2	3	0	9
Educate the public as to their rights	3	3	5	0
See that injured get compensated sooner	9	7	11	9
Other	27	27	27	32
	100%	100%	100%	100%
Number of interviews	378	228	116	34

^a The question was: "Can you think of anything that should be done to make things easier for people who are in automobile accidents in the future? Anything else?"

suggestion included only individuals who either did not file a suit or filed a suit even though they sustained only minor injuries. Perhaps these people think that, in retrospect, additional advice or information might have altered their own approach to securing a settlement.

Seventy-six percent of the respondents thought that a settlement should include compensation for pain and suffering, 63 percent thought that a plaintiff's lawyer should be compensated even though he loses the case, and 77 percent thought that an insurance company would offer a larger settlement if a lawyer had been retained (Tables 8-5, 8-6, and 8-7).

Those who actually hired a lawyer were slightly less inclined to favor the general notion of compensating a plaintiff's lawyer even though the case is lost than were those who did not hire a lawyer. This difference suggests that a possible factor in deciding whether or not to hire a lawyer is the belief that one should, and perhaps a

TABLE 8-5

*Whether Pain and Suffering Should be Compensated
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Whether pain and suffering should be compensated^a</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
Yes; yes, qualified	76%	71%	88%	71%
Depends	4	5	4	0
No; no, qualified	20	24	8	29
	100%	100%	100%	100%
Number of interviews	378	228	116	34

^a The question was: "When the person at fault does have enough insurance to pay damages, should he pay the injured person only for his medical expenses and lost income, or should he also pay something for the pain and suffering, or what? Why do you say this?"

TABLE 8-6

*Whether Claimant's Lawyer Should be Paid if He Loses the Case
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Whether claimant's lawyer should be paid if he loses the case^a</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Minor injury; Suit filed</i>
Yes: should be paid something	63%	67%	59%	53%
Depends	20	20	19	18
No, should not be paid	17	13	22	29
Total	100%	100%	100%	100%
Number of interviews	378	228	116	34

^a The question was: "Should a lawyer be paid even though he loses the case?"

lack of knowledge that one need not, compensate a lawyer if he loses.

Thus, to summarize the results of the general opinion and attitude questions asked, the majority of respondents preferred not to sue, thought that some action should be taken to make things easier for people in future automobile accidents, believed that one should be compensated for pain and suffering, felt that a claimant's lawyer should be compensated even if he loses the case, and expressed a conviction that an insurance company would offer a larger settlement if one hired a lawyer.

It was established earlier in this chapter that few of the respondents had any previous experience with the tort system; hence, it can be concluded that the majority of their general attitudes now held toward the tort system resulted from their involvement in the personal-injury automobile accidents being studied. Since only a relatively small proportion of the total population has ever been involved in tort litigation, it would be expected that those who

TABLE 8-7

*Whether Insurance Company Will Offer a Larger Settlement
if Lawyer Hired,
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Whether insurance company will offer a larger settlement if you hire a lawyer^a</i>	<i>Extent of injury and whether suit filed</i>			
	<i>All cases</i>	<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
Yes, will offer a larger settlement; yes, qualified	77%	80%	75%	71%
Depends	7	5	10	8
No, qualified; no, will not offer a larger settlement	16	15	15	21
Total	100%	100%	100%	100%
Number of interviews	378	228	116	34

^a The question was: "Do you think an insurance company will usually offer a larger settlement if you have a lawyer than if you don't?"

have are looked upon as "experts" by their associates. Consequently, the opinions and attitudes now held by these individuals will not only influence their own behavior should they be faced with the necessity of recovering damages in the future, but, more important, will also influence the behavior of others. To establish general attitudinal benchmarks, it would be necessary to ask these same questions of a cross-section sample of the Michigan population and compare the answer distributions with those of the selected subgroups reported here.

2. Opinions and Attitudes Toward the Specific Cases

a. Outcome of the cases

In analyzing the attitudes of injured persons, it will be useful to have in mind the outcome of their own injury claims, since the

outcome of their claims should be an important determinant of their attitudes. Although these have already been shown in Chapters 4, 5, 6, and 7, they will be restated here in more condensed form for the classes of persons whose attitudes were examined by personal interview. These classes comprise those whose injuries were "serious" whether they sued or not, and those with "minor" injuries who brought suit.

Within these personal interview classes, 96 percent received reparation from some source.* The small number who received no reparation were all victims of serious injury, and 92 percent of them did not retain a lawyer.† The adequacy of reparation varied widely within all classes of claimants; some received a large multiple of their economic losses, while others realized only a small fraction of it. Among the seriously injured, the proportion receiving reparation, and the proportion of those whose reparation was a high multiple of their economic loss, were significantly higher for those who sued than for those who did not. The average reparation was 110 percent for suitors, against 87 percent for nonsuitors. All suitors with minor injuries received some kind of reparation, and most of them received a high multiple of their loss. Their ratios averaged out at 180 percent. These distributions are shown in Table 8-8, and the averages are charted in Figure 8-1.

When attention is shifted from the broad area of total reparation to the narrower objective of settlements based on tort liability, the percentages are radically different, but the three classes are distributed in the same general relationship, one to another. The seriously injured nonsuitors fared least well. Fifty-five percent received no tort settlement at all; but a majority of those who did receive settlements received amounts which compared favorably with their losses. The seriously injured suitors were better off in

* This figure compares with 94 percent of the serious injury group, as shown in Chapter 5, Figure 5-12. It is higher because of the addition of the minor injury suit cases, in *all* of which some reparation was received.

† Of all the serious injury victims who did not retain a lawyer, 66 percent did not receive a tort settlement. See Chapter 6, Figure 6-2.

that a larger percentage (85 percent) received tort settlements, although the ratio of their settlements to their losses was no better.* Again, the most fortunate group were the "minor injury" subjects who brought suit; 92 percent of them received settlements, and 64 percent of them received net settlements which nearly equaled or far surpassed their economic losses. The distributions are shown in Table 8-9, and the averages in Figure 8-2.

One other factor which may have affected injured persons' attitudes was the fact that a suit or counterclaim was filed against the respondent. This happened to a small percentage of the claim-

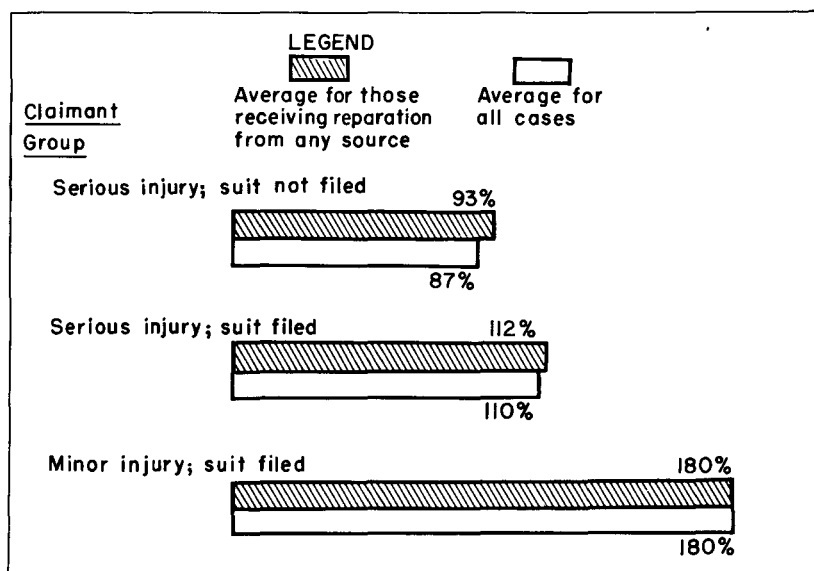
TABLE 8-8

*Net Reparation as a Percent of Economic Loss
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Net reparation as a percent of economic loss</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
<i>Total receiving no reparation</i>	4%	7%	1%	0%
<i>Total receiving some reparation</i>	96	93	99	100
1-25%	16	17	18	4
26-75%	22	25	21	9
76-150%	27	29	16	40
151% or more	19	15	22	34
Not ascertained	12	7	22	13
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Average for those receiving reparation</i>	108%	93%	112%	180%
<i>Average for all cases</i>	103%	87%	110%	180%
<i>Number of interviews</i>	378	228	116	34

* The average ratio of net settlements to economic losses in settled serious injury cases was 87 percent in suit cases, against 96 percent in no-suit cases. But this apparent inferiority of the suit cases loses significance when it is noted that the average *amount* in the suit cases was \$6180 against \$2561 for no-suit cases.

FIGURE 8-1—AVERAGE NET REPARATION AS A PERCENT OF ECONOMIC LOSS FOR CLAIMANT GROUPS
(Percentage distribution of all serious or litigated cases)



ants—always under 10 percent—in each of the three interview groups (Table 8-10).

To summarize, when reparation is compared with economic loss, it appears that the minor injury subjects who sued fared well more often than did either group of serious injury subjects. The serious injury subjects who sued fared better than the serious injury subjects who did not. Among those of all groups who received settlements, a majority received settlements which were adequate or generous in comparison with their economic losses; but generosity was much more frequently encountered by the subjects of minor injuries than by the subjects of major ones.

The seriously injured who received a tort settlement without resort to litigation were nonetheless adequately compensated, with tort reparation averaging 96 percent of total economic loss. In general, members of this group had a clear-cut case that was acknowledged by the other side and not contested.

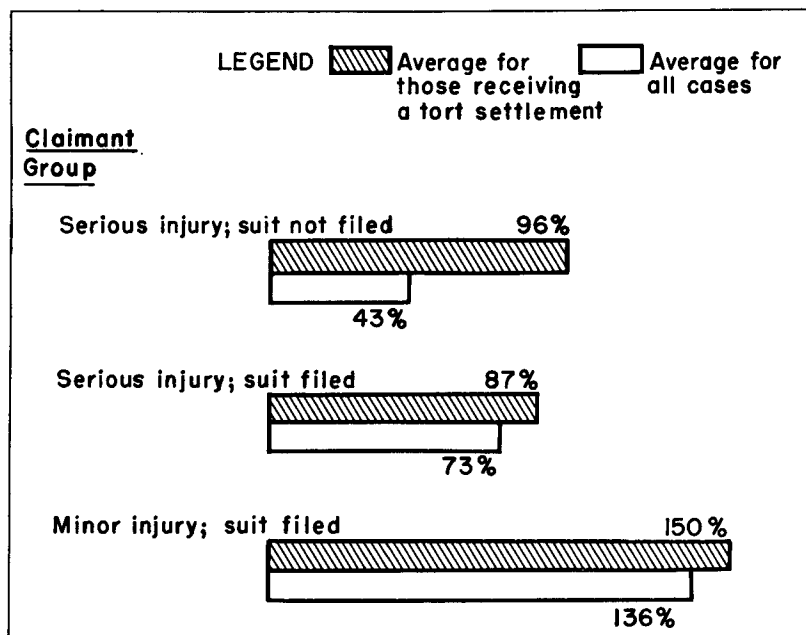
TABLE 8-9

*Net Tort Settlement as a Percent of Economic Loss
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Net tort settlement as a percent of economic loss</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury Suit filed</i>	<i>Suit filed</i>
<i>Total receiving no tort settlement</i>	38%	55%	15%	8%
<i>Total receiving a tort settlement</i>	62	45	85	92
1-25%	13	9	23	8
26-75%	14	10	27	7
76-150%	18	18	12	33
151% or more	12	7	14	31
Not ascertained	5	1	9	13
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
Number of cases	378	228	116	34
Average percent for those receiving a tort settlement	101%	96%	87%	150%
Average percent for all cases	60%	43%	73%	136%
Average size of tort settlement for those receiving a settlement	\$3847	\$2561	\$6180	\$1755

To summarize, when total reparation is compared with total economic loss, as a group those with minor injuries who filed suit received the largest recovery, and those with serious injuries who did not file suit received the smallest recovery. A small percent of each group also had a suit filed against them (Table 8-10). Keeping these background data in mind for the three groups of claimants, this chapter now turns to an examination of the present attitudes and opinions of the respondents toward both the decisions they made and the results of these decisions.

FIGURE 8-2—AVERAGE NET TORT SETTLEMENT AS A PERCENT OF ECONOMIC LOSS FOR CLAIMANT GROUPS
(Percentage distribution of all serious or litigated cases)



b. *Attitudes and opinions toward outcome*

Forty-three percent of all respondents who received a tort settlement thought that their settlement was quite generous or fair, while 54 percent thought that their settlement was inadequate. Claimants expressing greatest dissatisfaction were those with serious injuries who filed a suit (Table 8-11). However, even though a substantial proportion of this group were not satisfied with their settlements, only slightly more than half of them thought that a larger settlement could have been obtained if the case had been handled differently (Table 8-12). Surprisingly enough, 63 percent of those with minor injuries who filed suit thought that a larger tort settlement could have been obtained—yet, as a group, they were both generously compensated and relatively well satisfied with their settlement.

TABLE 8-10

*Whether Suit or Counterclaim Filed Against Respondent
in Connection With This Accident
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Whether a suit (or counterclaim) was filed against respondent in connection with this accident^a</i>	<i>Extent of injury and whether suit filed</i>			
	<i>All cases</i>	<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
Yes, suit (or counterclaim) filed against respondent in connection with this accident	6%	4%	8%	7%
No, suit (or counterclaim) not filed against respondent in connection with this accident	94	96	92	93
Total	100%	100%	100%	100%
Number of interviews	378	228	116	34

^a The question was: "Did anyone file a court suit against you or your insurance company, in connection with the accident?"

As one might expect, attitudes expressed toward the amount of total reparation received and toward the tort settlement reflect most directly the importance of economic recovery to the injured party. Of those dissatisfied with the outcome of their cases, 63 percent received total reparation equal to or less than 75 percent of their economic loss. Hence, the group of cases where total reparation exceeds 75 percent of loss includes only 37 percent of the dissatisfied respondents.

Turning to the tort settlement, only 20 percent of the claimants who received a tort settlement of less than 75 percent of their economic loss stated that the recovery was generous or fair. For those receiving a relatively larger tort settlement, about 70 percent rated the recovery as generous or fair.

TABLE 8-11

*Attitude Toward Tort Settlement
Distributed by Claimant Groups
(for serious or litigated cases in which a
tort settlement was received)*

<i>Attitude toward tort settlement^a</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Suit not filed</i>	<i>Suit filed</i>	<i>Minor injury; Suit filed</i>
Quite generous; fair	43%	52%	28%	54%
Pro-con	3	0	6	7
Inadequate	54	48	66	39
Total	100%	100%	100%	100%
Number of interviews	226	94	100	32

^a The question was: "How do you feel about the amount you got? Was it fair in view of what happened, or too little, or quite generous, or what? Why do you say this?"

TABLE 8-12

*Whether Respondent Thinks a Larger Settlement Could Have
Been Obtained if Things Had Been Done Differently
Distributed by Claimant Groups
(for serious or litigated cases in which a
tort settlement was received)*

<i>Whether respondent thinks a larger tort settlement could have been obtained if things had been done differently^a</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Suit not filed</i>	<i>Suit filed</i>	<i>Minor injury; Suit filed</i>
Yes, larger settlement could have been obtained	53%	49%	56%	63%
No, larger settlement could not have been obtained	47	51	44	37
Total	100%	100%	100%	100%
Number of interviews	226	94	100	32

^a The question was: "Do you think you could have gotten more if you had done things differently?"

Thus it is clear that the relationship between recovery and loss has a strong influence on a person's final attitude toward the outcome of his case.

At the same time, it might be expected that dissatisfaction with the tort settlement would reflect extensive medical problems to the injured party; that is, those sustaining more serious injuries (and thereby more difficult to treat medically) would be more dissatisfied with the tort settlement. This is not born out by the data. There appears to be no significant relationship between attitudes toward the tort settlement and extent of injury.

Some of the answers given by respondents when asked, "How do you feel about the amount you got? was it fair in view of what happened, or too little, or quite generous, or what?" are shown below. The answers are grouped by whether or not a suit was filed.

Tort settlement was quite generous or fair

No suit was filed

Ans. "I guess it was fair enough—we weren't trying to collect a lot of money."

Ans. "Fair, I guess. I still have trouble and always will though."

Ans. "She had no after effects, and they paid for everything; it was O.K."

A suit was filed

Ans. "I don't know how to value a life, but as far as insurance goes, it was probably fair."

Ans. "I think it was fair. They paid my expenses. I'll never be able to walk right again, but they can't pay me for that."

Ans. "Nothing could ever compensate for what happened, but financially, I think the amount was fair."

Tort settlement was inadequate

No suit was filed

Ans. "It was too little because there are still many expenses; the company wanted a quick settlement and was pushing me."

Ans. ". . . it's better to take what's offered though, because if you didn't, you might get less."

Ans. "We think a child's life has some value. The law places no value on a child's life and we think this is wrong."

Ans. "Considering the loss of being out of work and the condition it left me in, it was not enough."

A suit was filed

Ans. "It's never enough. A few thousand dollars couldn't compensate for what I've been through and still have ahead of me."

Ans. "It certainly wasn't generous. If my husband had lived, his job would be much better by now. What I got was little more than one year's salary."

Ans. "It was no where near enough. The court award was too little, and then we had to settle for less, because he [the defendant] went into bankruptcy."

Respondents who received a tort settlement were asked, "Do you think you could have gotten more if you had done things differently?" Fifty-three percent thought that a larger settlement could have been obtained (Table 8-12), and they offered a variety of explanations for their attitude:

Ans. "I should have waited longer. Had I gone to a hospital or doctor, I would have known my case better."

Ans. "If I had sued I may have [gotten more]. I didn't because he wasn't convicted of drunk driving, so it would have been difficult to sue and get more. No one would be a witness and say that he was drunk."

Ans. "Yes, because I don't think I should have agreed to a settlement, but my attorney said I should, so what could I do?"

Ans. "Yes, if we took it to court. He was drinking—definitely under the influence of alcohol."

Ans. "Yes but we were too shook up at the time, and didn't know just which way to turn."

Ans. "Yes, but I like to keep out of the courts as much as possible—don't want any part of it. Lawyers get the most of it."

Ans. "We should have had other witnesses, but our lawyer wouldn't let us say anything."

Ans. "I think if I had a different lawyer, I might have gotten a monthly or weekly payment out of it."

Ans. "I think we might have gotten a little more without the lawyer—a matter of about \$100."

Additional answers to this question are listed on page 287 for serious cases in which a decision was made not to sue, and on pages 288-89 for serious cases where a suit was filed.

All respondents were asked, "Everything considered, how do you feel about the way your case went." The satisfied-dissatisfied pattern evident in Table 8-13 bears some similarity to that shown for attitudes toward tort settlements received (Table 8-11). The principal difference is that the seriously injured group who filed a suit were relatively more satisfied with the outcome of the case than they were with the tort settlement received, which reflects satisfaction with compensation received from sources other than the tort system. The relationship between dissatisfaction with the tort settlement and dissatisfaction with the outcome of the case is shown in Figure 8-3. Of those who were both dissatisfied with the outcome of the case and received a tort settlement, 95 percent thought that the tort settlement was inadequate. Specific responses to this question are listed later in this chapter.

Taking a closer look at those who were dissatisfied with the outcome of their case, it is apparent, as might be expected, that a

TABLE 8-13

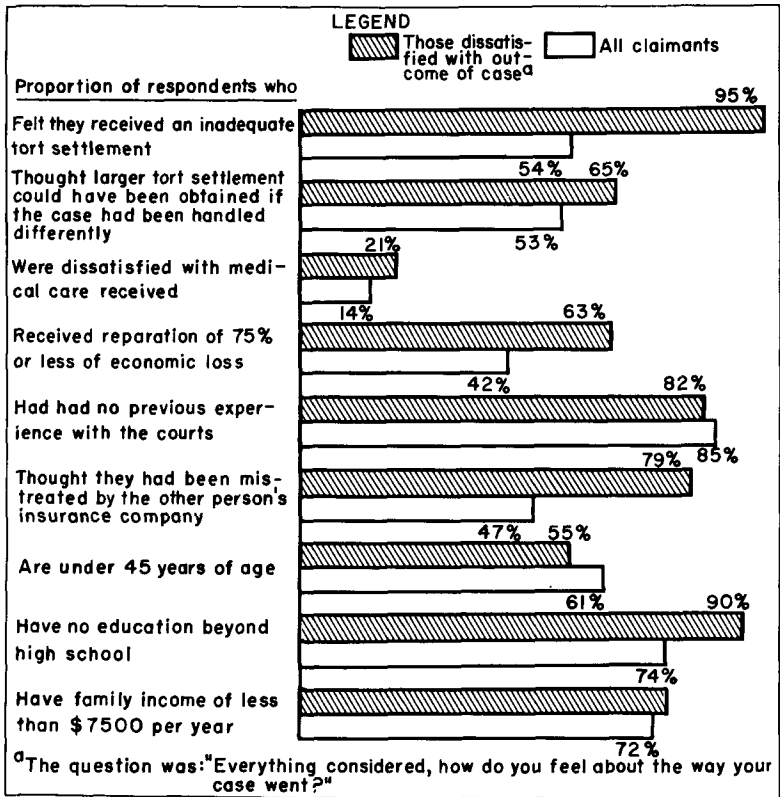
*Attitude Toward Final Outcome of the Case
Distributed by Claimant Groups
(for all serious or litigated cases)*

<i>Attitude toward outcome of case^a</i>	<i>All cases^b</i>	<i>Extent of injury and whether suit filed</i>		
		<i>Serious injury Suit not filed</i>	<i>Minor injury; Suit filed</i>	<i>Suit filed</i>
Satisfied	59%	65%	45%	66%
Pro-con	1	1	1	6
Dissatisfied	40	34	54	28
Total	100%	100%	100%	100%
Number of interviews	290	159	100	34

^a The question was: "Everything considered, how do you feel about the way your case went?"

^b This table omits answers that clearly referred to only one aspect of the case (such as answers referring to a specific lawyer or doctor) rather than to the outcome of the case, in general.

FIGURE 8-3—RELATIONSHIP BETWEEN VARIOUS CHARACTERISTICS AND DISSATISFACTION WITH OUTCOME OF CASE
(Percentage distribution of all serious or litigated cases)



large proportion (65 percent) of this group also thought that a larger tort settlement could have been obtained (Figure 8-3). Only 21 percent were dissatisfied with their medical care, indicating that satisfaction or dissatisfaction with medical care had little to do with a respondent's overall attitude toward the outcome of the case. On the other hand, 63 percent of those expressing dissatisfaction with the outcome of the case received reparation equal to less than 75 percent of their total economic loss (certainly a reasonable basis for dissatisfaction), and 82 percent reported no

previous experience with the courts, which may well have caused their expectations to be unrealistic and thus have led to disappointment with the results; however, it should be noted that of those who were satisfied with the outcome of their case, there were even fewer reports of previous court experience. Demographically, dissatisfaction with the outcome of the case predominates within the lower age, lower education, and lower income groups.

It should also be noted that although 47 percent of all the respondents who had dealings with the other person's insurance company expressed dissatisfaction with the way they were treated, an even higher proportion of those expressing dissatisfaction with the outcome of the case also expressed dissatisfaction with their treatment by the other person's insurance company (79 percent).

Thus, the two characteristics that most clearly differentiate claimants who are dissatisfied with the outcome of their case from those who are satisfied are, first, dissatisfaction with the tort settlement received and, second, a feeling that the other person's insurance company had mistreated them.

Dissatisfaction with treatment by the other person's insurance company, however, is certainly an expected attitude, since the other person's insurance company was one of the adversary parties in the litigation procedure. It must also be recognized that these expressions of dissatisfaction were elicited shortly after most respondents had completed a personal experience fraught with highly emotional content.

To enable the reader to understand how these attitudes were expressed, a sample of the responses to the question "How do you feel about the way you were treated by the other person's insurance company?" are listed below.

Answers expressing satisfaction with the opposing insurance company

Ans. "I feel that I've been treated very well, and I feel sure they will settle my entire claim when I submit it."

Ans. "They were fair and according to the law."

- Ans. "I was treated very well. They asked the questions they were supposed to ask and never got harsh in any manner."
- Ans. "We were treated real well. It would have been all right with us if they hadn't paid us anything, but they said we were entitled to it—so we took it."
- Ans. "I think the representative was very nice, and he treated me fine."

Answers expressing dissatisfaction with the opposing insurance company

- Ans. "They did not even come to talk to me or try to make a settlement, so I had to go to a lawyer to get anything."
- Ans. "They were not fair until we mentioned that the case would be taken to court."
- Ans. "They treated me a little crudely. They sent two men out to our premises, but they did not contact me. They inquired of neighbors about my condition."
- Ans. "They were trying to humiliate me for a quick settlement."
- Ans. "I feel they were too slow and would have done nothing had I not hired an attorney."
- Ans. "They just wanted to get it settled soon and weren't interested in how much more expense I might have because of the accident."
- Ans. "I think they were nasty. When I called to find out how the case was coming, I never got any information. They just said they did not know. When the adjuster came to offer us a quick settlement, he wanted us to name a figure. We wouldn't."

The attitudes and opinions of respondents toward the specific cases being investigated can be summarized as follows: first, an individual's attitude toward the outcome of his own case will be influenced strongly by the proportion of economic loss he recovers, regardless of the source of recovery; second, less than half of those who received a tort settlement regarded their settlement as generous or fair; third, slightly more than half believed that the tort settlement would have been larger if the case had been handled differently; and finally, 6 out of each 10 respondents were satisfied with the final outcome of their cases.

Although it is not shown in the tables, about half the respondents both wished that the case could have been settled sooner and thought that an earlier settlement could have been attained. Al-

most 3 out of 4 of those who wanted the case settled sooner gave as a reason their dislike of "uncertainty." This intolerance of uncertainty (a known correlate of anxiety states) indicates that litigation evokes strong feelings of anxiety in the parties involved. One wonders to what extent this anxiety is an important deterrent to litigation.

C. A DISCUSSION OF CLAIMANT SUBGROUPS

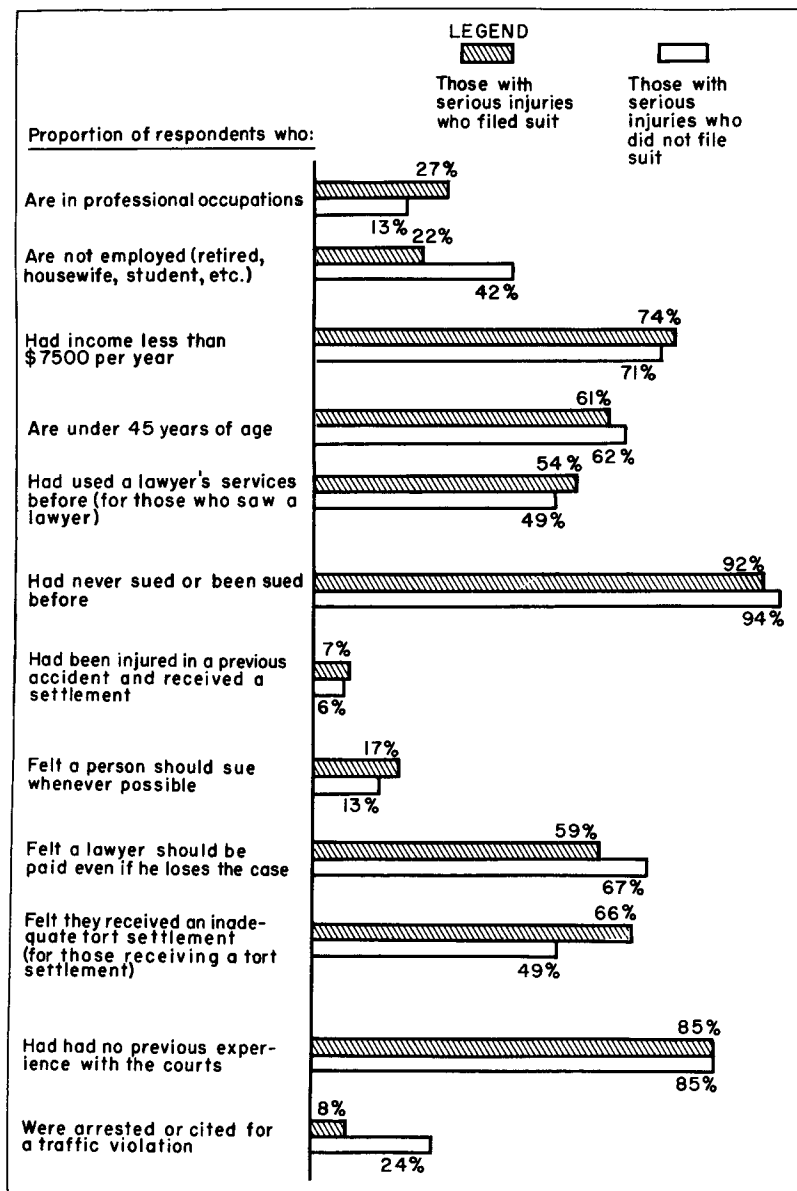
1. *Claimants with Serious Injuries Who Did Not File Suit*

One of the most important decisions that must be made pursuant to an accident is whether or not to file a suit. An understanding of the variables influencing this decision is particularly important in view of the fact that about 68 percent of respondents with serious injuries did not file suit. Since the potential economic loss is great in the case of fatal or serious injuries, this decision is a critical one.

In what ways do people who decide not to file a suit differ from those who sue? Figure 8-4 shows various characteristics that are related, either negatively or positively, to the decision not to sue. As compared to all respondents, proportionately more of those who decided not to file suit (1) are from the retired-disabled-housewife-student category, (2) think that a lawyer should be paid even though he loses the case, and (3) were arrested or cited for a traffic violation. The group includes proportionately fewer professional people and fewer people who feel you should sue whenever possible. In terms of previous experience with the courts—either as a witness, a member of a jury, or as a plaintiff or defendant—those who decided not to sue are identical to those who did file suit. Likewise, the groups are quite similar in regard to income, age, and settlements received as a result of previous automobile injuries. Note that most of the data presented in Figure 8-4 are summarized from previous tables.

Respondents in serious cases who made a decision not to sue can be classified into three major subgroups: (1) those who did not

FIGURE 8-4—RELATION BETWEEN VARIOUS CHARACTERISTICS AND THE DECISION TO FILE SUIT AND THE DECISION NOT TO FILE SUIT
(Percentage distribution of all serious cases)



talk with a lawyer, (2) those who talked with a lawyer but did not hire him, and (3) those who hired a lawyer but did not sue. Factors influencing the specific decision made as well as the present attitudes held by respondents toward their decisions are discussed below for each group.

Of the respondents who did not file suit, 43 percent talked with a lawyer about their case, and 57 percent did not (Table 8-14). When those who did not talk with a lawyer were asked why they hadn't, 1 percent of the group indicated that they intended to see a lawyer in the future, 14 percent were not able to give any answer as to why a lawyer was not seen, 23 percent of the respondents said they did not talk with a lawyer because they did not think it would be possible to collect, and the remaining respondents (19 percent) gave a variety of answers. Specific quotations will suggest some of the reasons underlying a decision not to see a lawyer.

TABLE 8-14

*Whether a Lawyer Was Seen After the Accident
and Reason for not Seeing a Lawyer
(for serious cases in which no suit was filed)*

	<i>Percent of all cases</i>
<i>A lawyer was seen</i>	43%
<i>A lawyer was not seen (by reason)</i>	57
Intend to see a lawyer in the future	1
There was no one from which to collect (no one else was at fault; the person at fault was unknown or had no insurance; I was at fault or a member of my immediate family was at fault)	23
Other answers (case was minor; could not afford a lawyer; our insurance company handled it; person at fault was a friend or relative)	19
Not ascertained	14
Total	100%
Number of interviews	228

- Ans. "I had no reason to. There was no other car involved, and my insurance paid what I expected."
- Ans. "There were so many things against me—no witnesses, and I was given a ticket."
- Ans. "I figured that the time and money spent on the cost of a lawyer would not pay."
- Ans. "I did not think we needed a lawyer—besides the other party was a widow, and we hated to cause her trouble."
- Ans. "It was a friend I was riding with; his insurance covered most of it, but I wouldn't have sued him anyhow."
- Ans. "My insurance company took care of me. They were fair."
- Ans. "We could hardly blame the driver of the car [injured person was minor who ran out in front of car] and he did everything he could do to help us."
- Ans. "He [the deceased] had no family or money."

A second subgroup of the respondents who did not bring suit includes individuals who talked with a lawyer, but did not hire him. Seventy-one percent of the respondents who talked with a lawyer did hire him, while 29 percent did not. In cases where the lawyer was not hired, respondents were asked, "Why not?" Many answers indicated that advice or comments offered by the lawyer were a critical factor in the decision; for example, respondents stated:

- Ans. "He said we didn't have a chance of winning."
- Ans. "The lawyer didn't think we needed his services."
- Ans. "He said it wasn't necessary, since insurance took care of it."
- Ans. "We just wanted his advice."
- Ans. "He wanted too large a fee."
- Ans. "They settled just about as we were going to file a suit."
- Ans. "My insurance took care of it."

All respondents who went to a lawyer were asked why they had chosen the lawyer they did.

Three major explanations account for 83 percent of the answers: they had used his services before, or he was recommended by a member of the family or by a friend. Table 8-15 shows the answer distributions for all respondents who talked with a lawyer, including those who filed suit.

TABLE 8-15
Reason for Choosing Lawyer
Distributed by Whether Lawyer Hired and Whether Suit Filed
(for serious cases in which a lawyer was seen)

<i>Reason for choosing lawyer</i>	<i>All cases</i>	<i>No suit filed</i>		<i>Suit filed</i>
		<i>Lawyer seen but not hired</i>	<i>Lawyer hired</i>	
Had used his services before	24%	30%	28%	19%
Recommended by a member of the family	22	25	31	15
Recommended by a friend	37	28	26	48
Recommended or hired by respondent's insurance company	6	1	3	10
Recommended by a legal aid bureau or a public official	1	0	1	1
Other answer	9	15	10	6
Not ascertained	1	1	1	1
Total	100%	100%	100%	100%
Number of interviews	223	34	73	116

The third subgroup of respondents who did not file suit is comprised of all persons who actually hired a lawyer to handle their case. Of this group, 75 percent received some tort reparation, and the group as a whole received total reparation averaging 89 percent of their total economic loss.

Thus, collectively at least, persons who hired a lawyer but did not file a suit were reasonably well compensated for their loss without having to endure the uncertainties associated with extended litigation. Nevertheless, 53 percent of those who received a tort settlement in this group thought that more compensation could have been obtained. Comparing this group with the total personal-interview sample, however, it seems clear that these individuals fared relatively well.

When those who hired a lawyer but did not file suit were asked

for specific reasons why a suit had not been filed, some answers reflected a reluctance to sue on the part of the claimant; others on the part of the lawyer, and still others of both. The most frequent reason given for this reluctance was that there was no one else to blame; that is, either no one else was involved in the accident or the claimant himself was at fault. More specifically, respondents stated that suits had not been filed for the following reasons.

- Ans. "Lawyer said there were no grounds for one."
- Ans. "According to the police, we didn't have any grounds."
- Ans. "The lawyer and insurance company handled it. Lawyer said that was all I could get."
- Ans. "My lawyer just didn't think it would help."
- Ans. "It wouldn't have done any good, and I felt sorry for his wife and children. They are the ones who need help."
- Ans. "It would have prolonged the thing 2-3 years more. We needed the money then."
- Ans. "We just never thought about it [filing a suit]."
- Ans. "No, because they [party at fault] were such nice people."
- Ans. "We just didn't like the idea."

Returning to the total group of respondents who did not file suit, it should be noted that although 22 percent of this group admitted fault in the accident, 93 percent received reparation from some source (Table 8-8, page 269). And for those receiving reparation, the average amount equaled 93 percent of their total economic loss. Thus, while only 45 percent of those not filing suit received reparation from the tort system (Table 8-9, page 271), their average total net reparation almost equaled their average economic loss, and as a group, they fared only slightly worse than the seriously injured group filing suit.

Forty-nine percent of those not filing suit thought they could have gotten more if they had done things differently (Table 8-12, page 274); this is almost 10 percent lower than the comparable figure for those who did file a suit. When asked what they would have done differently, the majority indicated that they should have waited longer to settle or that they should have entered into litigation. For example, respondents stated:

Respondents who did not talk with a lawyer

Ans. "Felt I had a clear-cut case against the other party. I felt they made us settle too fast. I think we should have gotten a lawyer."

Ans. "I should have waited and then made them pay my expenses."

Ans. "We should have gone to a lawyer, but we hated to get involved in a lot of trouble."

Respondents who talked with a lawyer but did not hire him

Ans. "I could have taken the doctor bills to show I paid out more than they paid me."

Ans. "I might have sued."

Respondents who did hire a lawyer but did not sue

Ans. "We probably would have gotten more if we had gone to court and let the case come to trial instead of settling out of court."

Ans. "If I had been financially able, I would have held out longer."

Ans. "The lawyer kept telling us to settle, or we might get nothing. I think he was in cahoots with the other lawyer."

Ans. "We had a poor lawyer—there was an eye witness in our favor and he [the lawyer] didn't take advantage."

Ans. "It was the end of our patience, and we couldn't face doing any more."

It is interesting to note that of the 56 respondents in this group who told the interviewer that they were at fault in the accident, only 36 had been arrested or cited for a traffic violation by the police officials investigating the accident. None of the 56 respondents stated that a suit had been filed against them in connection with the accident.

Finally, when asked about their overall satisfaction with the outcome of the case, 65 percent of those who did not sue said that they were satisfied, and 52 percent of those who did sue thought their tort settlements were either generous or fair (Tables 8-13 and 8-11, pages 277 and 274 respectively). For the subgroups, 82 percent of those who did not see a lawyer, 63 percent of those who did not hire a lawyer, and 44 percent of those who hired a lawyer but did not sue expressed satisfaction with the final outcome of the case. Some of the reasons given by respondents who were *dissatisfied* with the outcome are listed below for each group.

Respondents who did not talk with a lawyer

Ans. "Kinda bad. It should have been different, but I didn't know what I should have done."

Ans. "The police department made a monkey of me. They didn't take names of witnesses that I could find out."

Ans. "I should have seen a lawyer. I keep asking myself why I didn't."

Respondents who talked with a lawyer but did not hire him

Ans. "The person causing the accident should have paid more. I realize money won't take the place of life, but it would have helped at the time."

Respondents who did hire a lawyer but did not sue

Ans. "I feel bitter. I don't think my lawyer handled it right."

Ans. "We got too little considering the constant expense and the pain I continue to have."

Ans. "It was too long to wait for a settlement. It seems like insurance companies prolong cases too long."

Ans. "I was too nervous to go to court and sue the other party, but if we had sued, we might have been more satisfied."

2. Claimants with Serious Injuries Who Filed Suit

Of the estimated 4067 personal-injury automobile suits filed in Michigan in 1958, 67 percent were brought on account of injuries classified as serious, but these suits represented only about 26 percent of all serious injuries in automobile accidents during the same period of time; another 74 percent did not sue.

As noted previously in this chapter, 66 percent of the seriously injured who sued thought that the final tort settlement was inadequate, 56 percent thought that a larger settlement would have resulted had they proceeded differently, and 54 percent were dissatisfied with the final outcome of the case (Tables 8-11, 8-12, and 8-13). Reasons given for dissatisfaction with the outcome of the case varied, although most were concerned with actions taken by either the respondent's own lawyer or the "other guy's" insurance company. For example, when asked why they were dissatisfied, respondents answered:

Ans. "It was pretty miserable—justice isn't for the little man. I've had enough of courts. If you have enough money for sharp lawyer you're all set."

- Ans. "It just dragged and dragged. His insurance company got numerous postponements."
- Ans. "It was grossly unfair. It threw me from being a self-supporting woman, so that I'm dependent on others."
- Ans. "It was pretty damn miserable. The judge said I could have a new trial, but my lawyer didn't tell me. He got his money and didn't care about me it seemed."
- Ans. "If I had a different lawyer things might have been better."

Some of the actions that respondents believe, in retrospect, would have resulted in their receiving a larger tort settlement include:

- Ans. "If it had gone to a jury, but things were so complicated at the time."
- Ans. "Maybe if we had a different lawyer, we could have gotten more."
- Ans. "We should have had other witnesses, but our lawyer wouldn't let us say anything."

All respondents who filed a suit were asked whether or not they had disagreed with their lawyer's decisions at any time during the case. Table 8-16 summarizes the answers for respondents with both serious and minor injuries. Almost 4 out of 10 respondents told the interviewer that they had disagreed with their lawyers, and the most frequently mentioned source of disagreement was the respondent's belief that his lawyer wanted to settle the case too soon. Respondents summarized these disagreements in a number of ways.

- Ans. "The settlement was unfair, but the lawyer said take it or you might get nothing."
- Ans. "He wanted me to say something that wasn't true. I wouldn't tell a lie for nobody."
- Ans. "We think he should have tried to get us more."
- Ans. "He wanted to settle before we wanted to."
- Ans. "He was just no good."

It seems likely that better communication between the lawyer and his client would have eliminated or reduced a number of these complaints and others like them.

TABLE 8-16

*Whether Any Disagreement With Lawyer,
Distributed by Claimant Groups
(for all serious or litigated cases in which a lawyer was hired)*

<i>Whether any disagreement with lawyer^a</i>	<i>All cases</i>	<i>Extent of injury and whether suit filed</i>		
		<i>No suit filed</i>	<i>Suit filed</i>	<i>Minor injury; Suit filed</i>
<i>Did not disagree with lawyer</i>	63%	57%	63%	74%
<i>Did disagree with lawyer (by reason):</i>	37	43	37	26
<i>Lawyer wanted to settle earlier</i>	11	12	11	7
<i>Respondent wanted to settle earlier</i>	2	1	3	5
<i>Lawyer withheld infor- mation from respondent</i>	2	1	1	6
<i>Lawyer charged too much</i>	2	6	0	0
<i>Other</i>	13	8	19	4
<i>Not ascertained</i>	7	15	3	4
<i>Total</i>	100%	100%	100%	100%
<i>Number of interviews</i>	220	70	116	34

^a The question was: "Was there any time during the case when you didn't agree with your lawyer? Would you tell me about it?"

Once a suit had been filed, the claimant, with his lawyer's advice, had to decide how far to proceed with the litigation. Of those who filed suits, almost 3 out of 4 of the serious-injury cases were settled outside of court, and 86 percent of these were settled before the case came to trial. Although answers to the question "What made you decide to settle outside of court?" were expressed in a number of ways, the majority of respondents mentioned either reliance on their lawyer's professional judgment or the anxiety or uncertainty associated with litigation. It is not improbable that this second reason led many respondents to welcome a settlement

they later felt was inadequate, and then to ascribe the decision to their lawyer rather than to accept the responsibility themselves.

Some of the reasons respondents gave for settling out of court are listed below, in order by stage of litigation reached.

Case did not come to issue

Ans. "Accepted decision of my lawyer."

Ans. "We needed the money to live on."

Ans. "Couldn't stand the mental anxiety."

Case came to issue only

Ans. "I figured I should take what I could get and get it over with."

Ans. "I was satisfied—got all I wanted."

Ans. "We felt we might as well settle as we wouldn't get anything above the limits of his policy."

Case reached trial or pretrial conference

Ans. "Lawyer recommended it."

Ans. "We were tired of delays."

Ans. "The lawyer decided it would be best. I respect his opinion, but I think we should have gone on."

Nineteen percent of the serious-injury suits were settled by trial—15 percent by a jury trial and 4 percent by a nonjury trial. When asked how they felt about the trial, about half of the respondents expressed satisfaction and the other half dissatisfaction, with the proportion of satisfied respondents being relatively greater among those with nonjury trials (60 percent for nonjury trials versus 51 percent for jury trials). Respondents who felt that their trials were "unfair" were not asked for specific reasons for their present attitudes; however, when asked about the final outcome of the cases, some of those expressing dissatisfaction gave answers which referred directly to specific aspects of the trials. Such answers include:

Ans. "I was very unhappy about it [the trial]. I felt the judge was entirely out of order in his remarks to the jury, along with the fact that the whole thing was so poorly handled."

Ans. "It [the trial] was just a long drawn-out affair. It was a hard battle."

Ans. "I don't think it [the trial] went right. If I had known, I would have advised the lawyer to look into things very thoroughly before we went to court."

Ans. "It [the trial] just wasn't worth the trouble."

3. *Claimants with Minor Injuries Who Filed Suit*

Although only 1.3 percent of all persons sustaining "minor" injuries in Michigan automobile accidents file suit, suits involving minor injuries represent 33 percent of all automobile personal-injury suits filed in the state. Such suits may, of course, be accompanied by claims for property damage. In the Michigan survey, those with minor injuries who did not sue were not asked to complete a personal interview; however, 34 of the completed personal interviews from the court sample were with individuals whose suits resulted from minor injuries. This group is too small for extensive analysis, but its uniqueness deserves some attention.

If one were to characterize members of this group briefly, it would have to be said that the tort system was generous to them and they knew it. To be more specific, all of these persons received some reparation, and 92 percent received a tort settlement. Their reparation from all sources averaged 180 percent of their total economic loss, and the average tort settlement for those receiving a tort settlement equaled 150 percent of their economic loss. Compared with all persons who both filed a suit and received a tort settlement, substantially more members of this group thought that their tort settlement was quite generous or fair (54 percent versus 28 percent for serious cases), and a larger proportion were satisfied with the final outcome of the case (66 percent versus 45 percent for serious cases). Their attitudes reflect the outcome. (See Tables 8-11 and 8-13.)

Proportionately more members of this group had filed suits as plaintiffs prior to the cases asked about, although, in the aggregate, fewer had ever been in court before (either as a plaintiff, defendant, witness, or jury member). *None* of those with minor injuries who had sued before had ever won a case; whereas of the seriously

injured plaintiffs who had filed as plaintiffs prior to the present case, 31 percent had received a settlement. Since only half as many members of this group had been injured in previous automobile accidents (14 percent versus 23 percent), it would be expected that a large part of their previous experiences with the tort system did not result from automobile accidents. The specific reasons for previous litigation were not asked. It might be expected that members of this group had a strong initial propensity to sue which had led them to bring past tort litigation without good cause. Perhaps the poor decisions made earlier provided experience that led to rewarding decisions in the cases being studied here.

The propensity of this group to sue is also reflected in their general opinions and attitudes toward the tort system. For example, proportionately few of them thought that anything should be done to make things easier for those in future automobile accidents. Responses given by those who did think something should be done were heavily directed toward some sort of advisory board, whose function would be to provide information to the public. These answers seem plausible in view of the respondents' earlier failures with the tort system. Also, a significantly higher proportion of plaintiffs with minor injuries felt that one should sue whenever possible, although relatively few of them thought that an insurance company would increase a settlement offer if the claimant hires a lawyer.

Specific attitudes expressed by plaintiffs with minor injuries were quite different from those expressed by the seriously injured plaintiffs. A much smaller proportion of this group (28 percent versus 54 percent), expressed dissatisfaction with the outcome of the case, and the reasons given for dissatisfaction tended to concentrate on the "other guy" or his insurance company, as opposed to the respondent's own lawyer or the courts. Such answers included:

Ans. "They [other person's insurance company] ignored my case. They promised to send someone to see me, but never did—so my

attorney entered a big law suit against them. Then we got some action—didn't expect or want \$25,000 [amount sued for], just wanted action on their part and that really brought them here."

Ans. "I know if they offered me more, I would have been satisfied. I think it's awful the way these insurance companies charge people, and they don't give nothing back."

Ans. "I didn't like it at all. They [other person's insurance company] wouldn't have done anything at all if my attorney hadn't gone to them."

Ans. "They [other person's insurance company] came to my place of business to try to get me to settle. They were awfully eager; they wrote all kinds of letters and tried every way they could to get to me instead of dealing through my lawyer."

Even though plaintiffs with minor injuries were very generously compensated relative to their economic losses (which were small in terms of absolute dollar amounts), more than 6 out of 10 of those receiving a tort settlement thought that they could have obtained a larger settlement if the case had been handled differently. The overwhelming response when asked what should have been done differently was that the case should have been pursued further into litigation. It would seem that experience with the tort system (even if the experience was unsuccessful), plus lack of economic pressure to settle, plus an economically generous settlement offer creates a litigious state of mind on the part of the plaintiff—it "whets the appetite." One would expect that the inclination toward litigation will remain with these individuals, and will influence their future behavior.

Some of the specific actions respondents thought would have resulted in a larger settlement were expressed in these ways.

Ans. "I should'a took it to court, but I needed the money and I chalked it up to experience."

Ans. "Because if I had been willing to take it into court, I think I may have gotten more—but considering my loss of time from work and all I would have to go through, I just went along with what my lawyer advised."

Ans. "I think we could have gotten more if I hadn't signed off. I signed a paper for \$250 after the insurance man kept coming over every day and bothering me."

Ans. "I don't think I should have agreed to a settlement, but I was advised to by my attorney, so I did what he said. What could I do? He [lawyer] just wanted to settle and get his money."

Table 8-16 (page 290) shows that fewer plaintiffs with minor injuries stated that they disagreed with their lawyer than did plaintiffs with serious injuries. The specific kinds of disagreements mentioned by the two groups were quite similar. Answers for plaintiffs with serious injuries are listed on page 289; sources of disagreement given by plaintiffs with minor injuries include:

Ans. "I didn't feel satisfied, because he didn't give us enough information about what we should do."

Ans. "He thought I wanted too much for damages."

Ans. "At first, we didn't want to settle—lawyer thought we should. He didn't think we should get any more."

Ans. "His apparent dishonesty. When he made up his first report, he made up a story about my needing help at home to care for my family. It wasn't true and I told him so. He had already shown it to the other lawyer before I saw it."

Ans. "I went to him because my husband didn't want to settle without a lawyer. He [lawyer] wanted me to wear a brace like an invalid. I guess lawyers are all like that."

All of the cases involving plaintiffs with minor injuries were settled outside of court. Twenty-four percent were settled before the case came to issue, and the remaining 76 percent were settled after issue but before trial. Fifteen percent of the cases reached pretrial conference.

Most of the reasons given for settling the cases out of court dealt in one way or another with the respondent's own lawyer—generally with the lawyer's advice or his fee. For example:

Ans. "Well, my attorney said to. He [lawyer] said talking to a jury is like talking to babies—feeding them with a spoon. You have to baby them. You might get more or nothing at all, so the lawyer thought we'd better take what we could."

Ans. "When they [other party] found out which judge we had, they immediately offered to settle. Our judge is known to always be against people pulling out from behind traffic without looking—that's just what the other fellow did, so they knew they'd lose."

A final note of caution should be given regarding the attitudes reported above. Even though many of the claimants had recently been introduced to some aspect of the tort system, their opinions and attitudes must still be considered as those of the uninformed layman. One might characterize their present knowledge in much the same way as the medical knowledge of a patient who had been allowed to observe his own operation. In both situations the knowledge is fragmentary, the emotional involvement high.

Dissatisfaction may be high because the claimant's initial expectations were unrealistically high, even though his final settlement more than covered his loss. It seems clear that the level of dissatisfaction could be substantially reduced if claimants as a group could be provided with an adequate quantity of understandable information concerning the progress of their cases, the alternatives open to them, and the relative risks involved. To state it another way, laymen's satisfaction with, and acceptance of, the tort system would be increased if the purposes and procedures of the systems were known to them; the argument is for a clear, carefully conceived approach to claimant education, both before and after an accident occurs.

D. OPINIONS AND ATTITUDES OF DEFENDANTS

The defendants' questionnaire used in the Michigan survey designed to examine the process by which the individual undertook to defend himself and the resulting consequences of the process itself. The striking conclusion that must be drawn from examining results of these interviews is that the defendant plays a relatively minor role in the litigation process, even though it is the determination of his guilt or innocence that is the focal point of the process.

What are some of the indications of the defendant's lack of involvement in the litigation process? First of all, when asked whether or not the case had been settled, 92 percent of the defendants stated that it had; however, 33 percent did not know

what the outcome of the case had been— that is, whether or not the plaintiff had received a settlement (Table 8-17). The remaining 8 percent stated that the case had not been settled, that no suit had ever been filed against them, or that they were not familiar with the outcome of the case. Defendant's knowledge concerning the outcome of the case is summarized graphically in Figure 8-5.

In all instances, data from interviews with lawyers and from the court records indicated that these cases had, in fact, been settled. Figure 8-5 shows that defendants' knowledge regarding

TABLE 8-17

*Defendant's Knowledge Concerning Outcome of Case,
Distributed by Stage of Litigation Reached
(for all defendants)*

<i>Defendant's knowledge concerning outcome of case</i>	<i>All cases</i>	<i>Stage of litigation reached</i>		
		<i>Did not come to issue</i>	<i>Came to issue, but not to trial</i>	<i>Came to trial</i>
Defendant stated that case has been settled, and:				
Plaintiff received a settlement	50%	24%	48%	74%
Plaintiff did not receive a settlement	9	12	7	21
Respondent doesn't know if plaintiff received a settlement	33	64	35	5
Defendant believed that case had not been settled or that there was no suit	5	0	6	0
Defendant doesn't know outcome of case	3	0	4	0
Total	100%	100%	100%	100%
Estimated number of interviews	183	13	145	25

FIGURE 8-5—RELATIONSHIP BETWEEN WHETHER DEFENDANT KNEW THE OUTCOME OF THE CASE AND STAGE OF LITIGATION REACHED
(Percentage distribution of all defendants)

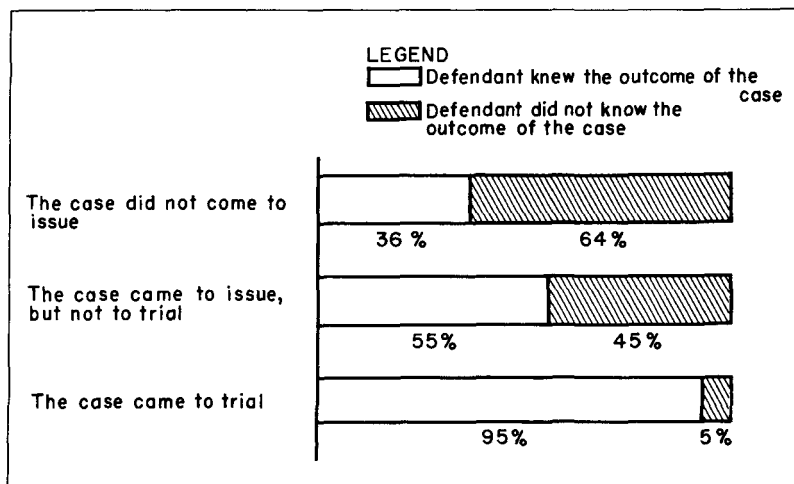


TABLE 8-18

*Amount of Tort Settlement as Reported by Defendants
(for settled court cases in which an individual defendant
reported that plaintiff received a settlement)*

<i>Size of tort settlement</i>	<i>All cases</i>
\$1—499	7%
\$500—999	1
\$1000—1999	12
\$2000—4999	20
\$5000—9999	9
\$10,000—24,999	3
\$25,000 or more	2
Not ascertained; defendant doesn't know amount	46
Total	100%
Aggregate settlements reported	\$7,585,250
Average settlement reported	\$5188
Number of interviews	94

the specific outcome of a case increases dramatically as the case proceeds through the various stages of litigation. For cases that did not come to issue, 64 percent of the defendants could not report the final disposition of the case. For cases that came to issue but not to trial, the figure drops to 45 percent, and for cases that came to trial, only 5 percent did not know the outcome of the case.

The ninety-four individuals who reported that the plaintiff had received a settlement were asked what the amount of the settlement had been. About one half of this group did not know the amount of the tort settlement (Table 8-18); in every one of these cases the settlement had been paid directly by an insurance company. In the six instances where the defendant paid all or part of the settlement himself, the amount of the settlement was reported in every instance.

Time and money spent by a defendant to settle his case provides a second measure of his involvement in the litigation process. Table 8-19 indicates that 55 percent of all defendants spent an average of 2.6 days handling their cases; the remainder did not report any loss of time. Only 5 percent needed more than 5 days to handle their cases. Turning to time lost from work, 33 percent reported some time loss because of the suit, but over one half of these reported a loss of 1 day or less. The average number of days lost from work, for those losing some time, was 2.5 days.

Three percent of the defendants reported making a direct payment to the plaintiff, 12 percent reported some legal fees, 20 percent reported some wage loss, and 19 percent reported other expenses associated with settling the case (Table 8-20).

On the average, each defendant spent only \$96 on his defense: \$39 in direct payments to the plaintiff, \$42 for legal fees, \$9 in lost wages, and \$6 for other expenses. However, over 60 percent of the defendants reported no defense cost of any type. Average defense costs are shown in Figure 8-6. The reader should keep in mind that the averages shown graphically are for all defendants, many of whom reported no loss. If one considers only those de-

TABLE 8-19

*Number of Days Required by the Defendant
or His Family to Handle the Suit
(for all settled cases)*

<i>Number of days</i>	<i>Total days</i>	<i>Days lost from work^a</i>
<i>Some days required</i>	55%	33%
1 day or less	30	17
2 days	11	7
3—5 days	9	7
6—10 days	3	2
11 days or more	2	0
<i>No days required</i>	34	4
<i>Not ascertained</i>	11	63
Total	100%	100%
Aggregate number of days required	7158	4279
Average number of days required for those requiring some days	2.6	2.5
Number of interviews	175	175

^a Based on an 8-hour day, 5-day week.

fendants reporting some expense or some time lost from work, the averages are higher (see Table 8-20).

When compared with plaintiffs, the defendants' relative lack of involvement in the litigation process is reflected in their attitudes toward the outcome of the case. Fifty-nine percent of them were satisfied with the outcome of the case, 33 percent were dissatisfied, and 8 percent did not feel strongly one way or the other (Table 8-21). Comparable figures for plaintiffs are 43 percent, 54 percent, and 3 percent, respectively. The percentage distribution for defendants who expressed an opinion is shown graphically in Figure 8-7.

Present attitudes toward the outcome of the case do not bear any strong relationship to penalties incurred by defendants (Table

FIGURE 8-6—DEFENDANTS' AVERAGE COST OF DEFENSE
(Percentage distribution of all settled cases)

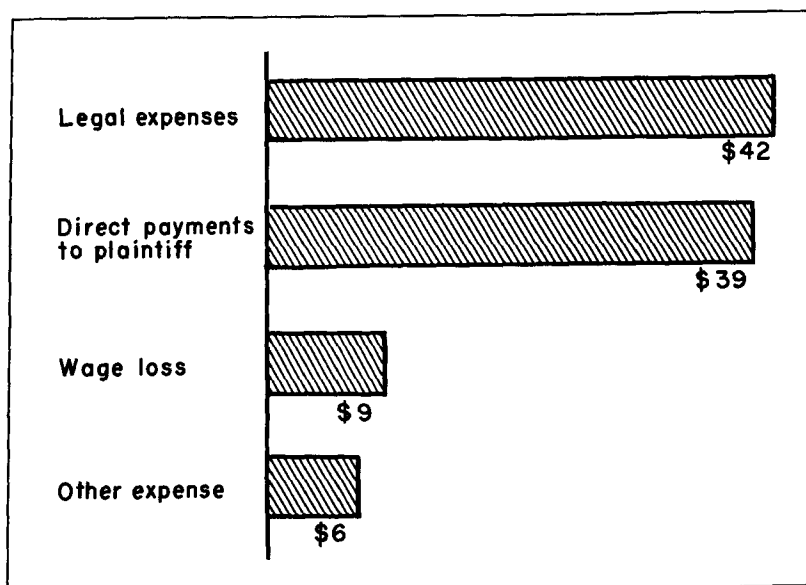
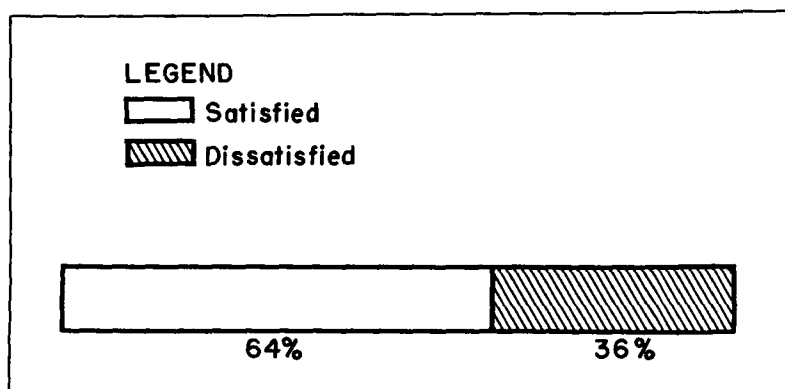


FIGURE 8-7—DEFENDANT'S ATTITUDE TOWARD OUTCOME OF CASE^a
(Percentage distribution of defendants in settled cases, excluding 8% of the defendants who did not answer the question)



^aThe question was: "Everything considered, are you satisfied with the way the case turned out? Why do you say that?"

TABLE 8-20
*Expense Incurred by Defendant or His Family in Handling the Suit,
 Distributed by Type of Expense
 (for all settled cases)*

Amount of expense	Type of expense				
	Total expense	Direct payment to plaintiff	Legal	Wage loss	Other
Total reporting some expense	36%	3%	12%	20%	19%
\$1-49	20	0	2	15	18
\$50-99	6	0	2	4	1
\$100-199	2	0	2	1	0
\$200-499	5	1	4	0	0
\$500-999	1	0	1	0	0
\$1000 or more	2	2	1	0	0
Total reporting no expense	59	96	83	76	78
Not ascertained; defendant does not know amount	5	1	5	4	3
Total	100%	100%	100%	100%	100%
Aggregate expense reported	\$473,700	\$198,000	\$202,700	\$43,500	\$29,500
Average expense for those reporting some expense	\$251	\$1,330	\$346	\$43	\$31
Average expense for all defendants	\$96	\$39	\$42	\$9	\$6
Number of interviews	175	175	175	175	175

TABLE 8-21
*Defendant's Attitude Toward Outcome of Case,
 Distributed by Whether Penalty Imposed and Type of Penalty Imposed
 (for defendants in settled cases)*

<i>Defendant's attitude toward outcome of case</i>	<i>All Cases</i>	<i>Penalty imposed;</i>			<i>Type of Penalty</i>
		<i>No penalty imposed on defendant</i>	<i>Automobile insurance cancelled</i>	<i>including insurance cancellation</i>	
<i>Satisfied</i>	59%	59%	59%	61%	77%
<i>Dissatisfied</i>	33	32	41	36	23
<i>Not ascertained</i>	8	9	0	3	0
<i>Total</i>	100%	100%	100%	100%	100%
<i>Number of interviews</i>	175	125	21	50	7

TABLE 8-22
*Defendant's Attitude Toward Outcome of Case Distributed by Time
 Required to Settle the Case
 (for defendants in settled cases)*

<i>Defendant's attitude toward outcome of case</i>	<i>All cases</i>	<i>Time required to settle the case</i>			<i>Respon- dent doesn't know</i>
		<i>Less than 1 year</i>	<i>1 year, but less than 2 years</i>	<i>2 years but less than 3 years</i>	
<i>Satisfied</i>	59%	54%	63%	71%	59%
<i>Dissatisfied</i>	33	43	35	29	19
<i>Not ascertained</i>	8	3	2	0	22
<i>Total</i>	100%	100%	100%	100%	100%
<i>Number of interviews</i>	175	23	35	35	57

TABLE 8-23
*Defendant's Attitude Toward Outcome of Case,
 Distributed by Sex of Defendant
 (for defendants in settled cases)*

<i>Defendant's attitude toward outcome of case</i>	<i>All cases</i>	<i>Sex of defendant</i>	
		<i>Male</i>	<i>Female</i>
Satisfied	59%	58%	63%
Dissatisfied	33	32	37
Not ascertained	8	10	0
Total	100%	100%	100%
Number of interviews	175	146	29

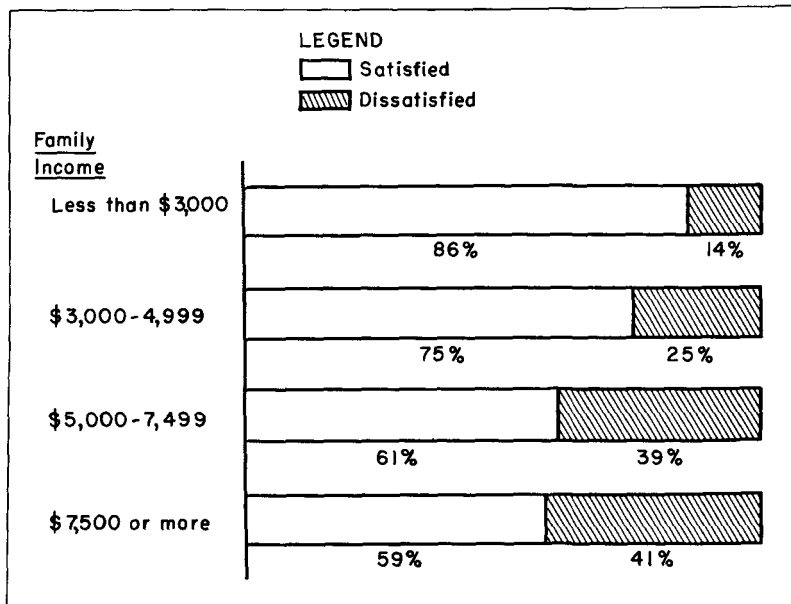
8-21), time required to settle the case (Table 8-22), or sex of the respondent (Table 8-23). In fact, it is interesting that five of the seven defendants who had their licenses to drive suspended were, nevertheless, satisfied with the outcome of the case. This lack of correlation is what would be expected if the attitudes expressed lack any real conviction—that is, if the individual does not feel strongly one way or the other.

However, the attitude expressed by defendants toward the outcome of the case is strongly related to family income (Table 8-24). In families with present incomes of less than \$3000 a year, 86 percent reported that they were satisfied with the outcome of the case. The percent reporting satisfaction with the outcome of the case decreases consistently as the income of the family increases. For families with incomes of \$5000 or more, the percent of defendants reporting satisfaction falls to less than 60 percent. It is probable that those with higher incomes tended to become personally more involved in the litigation process. This group includes those with higher education as well as those with more to lose in terms of wealth and status. The relationship between family income and attitude toward the outcome of the case is summarized graphically in Figure 8-8.

TABLE 8-24
*Defendant's Attitude Toward Outcome of Case,
 Distributed by Family Income of Defendant
 (for defendants in settled cases)*

<i>Defendant's attitude toward outcome of case</i>	<i>All cases</i>	<i>Family income of defendant</i>				<i>Not ascertained</i>
		<i>Less than \$3000</i>	<i>\$3000 -4999</i>	<i>\$5000 -7499</i>	<i>\$7500 or more</i>	
<i>Satisfied</i>	59%	86%	71%	57%	58%	39%
<i>Dissatisfied</i>	33	14	24	36	39	40
<i>Not ascertained</i>	8	0	5	7	3	21
<i>Total</i>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<i>Number of interviews</i>	175	22	31	40	44	38

FIGURE 8-8—RELATIONSHIP BETWEEN DEFENDANT'S ATTITUDE TOWARD OUTCOME OF CASE AND FAMILY INCOME
(Percentage distribution of defendants in settled cases, excluding 8% of the defendants who did not answer the question)



Additional evidence of the lack of defendants' involvement is the fact that only 28 percent of them felt that they had been treated unfairly by anyone involved in the litigation process (Table 8-25). The majority of the comments concerning unfair treatment (about two-thirds) were directed at the plaintiff or the plaintiff's lawyer. For example, when asked "Do you feel that anybody treated you unfairly? (If yes) Who treated you unfairly?" defendants stated:

Ans. "The parents [of the injured] and their attorney. They threatened my wife on the telephone."

Ans. "The other attorney; he put a tail on me and I was going to school at the time. Twice a week this old gray car would follow me all the way to school."

Ans. "The other lawyer made some damaging remarks, but I suppose that's what lawyers are for—to tear people down."

- Ans. "Their lawyer and the police. They didn't let me explain in my own way. And the police, they didn't send her [the injured] to the hospital right after the accident—she didn't seem to be hurt."
- Ans. "Suit in itself was unfair—there were no grounds. Some sharp lawyer got hold of her [plaintiff] and told her to try to get money. She claimed I was a negligent driver. It caused me a lot of anguish."

TABLE 8-25

*Defendant's Feelings About Fairness of Treatment Received
(for defendants in settled cases)*

	<i>Percent of settled cases</i>
Defendant thought he was treated unfairly by:	
The plaintiff or the plaintiff's lawyer	16%
His own insurance company	2
Law enforcement personnel	5
Judicial personnel	1
Other answers	4
Defendant feels he was not treated unfairly	69
Not ascertained	3
Total	<u>100%</u>
Number of interviews	175

However, the most interesting statistic in Table 8-25 is that 69 percent of all defendants reported that they were not treated unfairly by anyone.

A final bit of evidence concerning the lack of defendants' involvement can be found in their knowledge of, and attitudes toward, the timing of settlement. Defendants who reported that their cases had been settled were asked how long after the accident the settlement had occurred. About one third had no idea when the case had been settled. And when asked whether or not they would have preferred to settle the case sooner, almost half of those responding said either "no" or that it didn't matter one way or the other (Table 8-26). Of those who would have pre-

ferred to settle the case sooner, the reasons given tended to center around the problem of uncertainty. For example:

Ans. "When you're sued for \$100,000, you're always wondering. Always that suspense."

Ans. "I certainly would have. It's awfully difficult to remember details after 3 years for an incident that hasn't been in your mind for 3 years."

TABLE 8-26

Whether Defendant Would Have Preferred to Settle the Case Sooner, Distributed by Whether He Thinks the Case Could Have Been Settled Sooner
(for defendants in settled cases who knew how long after the accident the case had been settled)

<i>Whether defendant would have preferred to settle the case sooner^a</i>	<i>Whether the defendant thinks the case could have been settled sooner</i>			
	<i>All cases^b</i>	<i>Yes</i>	<i>No</i>	<i>Don't know</i>
<i>Yes (by reason)</i>	52%	81%	35%	48%
Disliked uncertainty (it made me nervous; I didn't like the case hanging over me)	34	49	20	37
Other	18	32	15	11
<i>No</i>	23	9	42	14
<i>Indefinite (it didn't matter; I couldn't care less one way or the other; I don't know)</i>	25	10	23	38
Total	100%	100%	100%	100%
Number of interviews	122	35	43	44

^a The question was: "Would you like to have settled the case sooner? Why?"

^b Excludes 1612 weighted cases (N=52) who did not know when the case had been settled.

Defendants who stated that the timing of the settlement didn't make any difference to them, gave such answers as:

- Ans. "It didn't bother me. Attorney wasn't willing to settle sooner because he wanted to be sure of injuries."
- Ans. "No difference to me. My insurance took care of it."
- Ans. "It just wasn't up to me."
- Ans. "Didn't care. It was up to the lawyer."
- Ans. "I left that strictly up to——[name of insurance company]."
- Ans. "No, because I could see they were trying to milk the insurance company. If it took 5 years, it didn't really make any difference to me."

Of the persons whose cases took less than one year to settle, 37 percent would have preferred to settle sooner. The figure increases for cases that took up to three years to settle, and then drops to 38 percent for cases that took more than 3 years to settle (Table 8-27).

In summary, the Michigan survey shows that the defendant is best characterized by his lack of involvement in the litigation process, evidenced by both his lack of knowledge about the outcome of the case and by the small amounts of time and money he is required to invest to reach settlement. This lack of involvement results in attitudes and opinions that appear to lack the conviction with which attitudes and opinions are held by plaintiffs. The principal burden imposed on most defendants is the *uncertainty* associated with being sued, and this burden could be substantially reduced through improved communication between the defendant and his lawyer.

E. BASIC "HOSTILITY" AS A FACTOR IN THE BEHAVIOR AND ATTITUDES OF ACCIDENT VICTIMS

The attitudes expressed by the victim of an automobile accident about the consequences of the accident will reflect, at least in part, his habitual views of the world and his habitual ways of reacting to other events. In other words, there may well be persistent differences between people's personalities that will affect their

TABLE 8-27
*Whether Defendant Would Have Preferred to Settle the Case Sooner
 Distributed by Time Required to Settle the Case
 (for defendants in settled cases who answered the question about
 how long after the accident the case had been settled)*

<i>Whether defendant would have preferred to settle the case sooner^a</i>	<i>Time required to settle case</i>			
	<i>All cases^b</i>	<i>Less than 1 year</i>	<i>1 year, but less than 2 years</i>	<i>2 years, but less than 3 years 3 years or more</i>
<i>Yes (by reason)</i>	52%	37%	64%	60%
<i>Disliked uncertainty (it made me nervous; I didn't like the case hanging over me)</i>	34	26	44	35
<i>Other</i>	18	11	20	25
<i>No</i>	23	31	14	21
<i>Indefinite (it didn't matter; I couldn't care less one way or the other; I don't know)</i>	25	32	22	19
<i>Total</i>	100%	100%	100%	100%
<i>Estimated number of interviews</i>	122	23	37	36
				26
				30
				100%

^a The question was: "Would you like to have settled the case sooner? Why?"

^b Excludes 1612 weighted cases (N = 52) who did not know when the case had been settled.

behavior, including the way in which they react to automobile accidents. In particular, if there are differences in the extent to which people feel and express hostility toward others, these might well be reflected in differences in their eagerness to sue, their willingness to settle without a suit, and their satisfaction with the outcome of the case.

The survey directors therefore decided to include in the personal interview questionnaire a few questions whose responses would indicate degrees of basic hostility.

A search of the literature on hostility revealed several different dimensions of hostility, and a distinction between hostility (an attitude) and aggression (an action), but no ready-made and tested instrument that could be used in the questionnaire.¹ Therefore, a set of questions was specifically designed for the questionnaire, and inserted following the section on attitudes toward specific aspects of the auto injury compensation system, the results of which have been reported earlier in this chapter. Five questions were asked, which were disguised as simple attitudinal questions. They were balanced so that for two of the questions an affirmative response was judged hostile, for two a negative response was judged hostile, and one was balanced by requiring the respondent to choose between two alternative answers—one hostile, the other not.

The questions were:²

If a product just isn't made right, should the seller be forced to pay a

¹ The excellent book by Arnold H. Buss, *The Psychology of Aggression* (New York: John Wiley and Sons, 1961), was not available at the time, and even the instruments reported there seem more fitting for laboratory studies than field studies. We relied largely upon Elton B. McNeil's "Psychology and Aggression," *Journal of Conflict Resolution*, III (September 1959), 195-294, for a summary of the field and reference to several articles reporting questionnaire instruments.

² It will be noted that a tendency to agree with all statements or to disagree with all would not affect an index based on all five questions because of the balancing, i.e., agreement with the statement is an indication of hostility for two questions and of its absence for two others. For evidence of the existence of this "acquiescence factor" see: B. M. Bass, "Authoritarianism or Acquiescence," *Journal of Abnormal and Social Psychology*, 51 (1955), 616-23; and S. Messick and D. N. Jackson, "Acquiescence and the Factorial Interpretation of the MMPI," *Psychological Bulletin*, 58 (July 1961), 299-304.

penalty as well as refund the purchase price?

Do you think most people care what happens to the next fellow?

Would almost anyone tell a lie to keep out of trouble?

Is it better to believe in people or to be suspicious of everyone?

Do you think most people will be nice to you if you are nice to them?

The answers were recorded as nearly verbatim as possible, and the contents analyzed to insure comparability. Five-point scales were then applied to score each answer (ranging from extremely hostile to completely nonhostile), and a procedure was devised to weight the answers in accordance with the distribution of replies.³ The resulting weighted score was then compressed into three groups with the low and high "hostility" groups kept large enough so that sampling variability was within bounds, but small enough to represent groups markedly different from the average.

The word "hostility" is used in quotation marks because it is defined operationally by the questions asked and the weights used, and there is no assurance that the scores and the groupings represent any personality differences in general, or the hostility-complacency dimension in particular. If the groups differ in behavior and attitudes in the expected ways, some credence may be given to the conclusion that they differ in some way which is tapped by the scores and which may tentatively be called "hostility." If they do not, it may mean that the measuring instrument is faulty, or that such differences do not affect the behavior or attitudes of accident victims.

If the "hostility" measure is to be useful, it must be more than a proxy for demographic differences such as age, education, and income. Table 8-28 shows to what extent "hostility" can be regarded as measuring the same thing as more traditional variables. It

³ The fifth category (unqualified hostile responses) was given a weight of two, except in the third question where it was counted only as one because in the first, fourth and fifth question even a qualification of a nonhostile answer was considered worth one point on the hostility score, whereas on the third question the middle or pro-con code was given no weight. Indexes are generally not much affected by changes in the weighting systems.

would seem that "hostility" is correlated with age, education, and income, but only mildly. Those under 45, or with no education beyond high school, or with family incomes of less than \$7500 were more likely to have high "hostility" scores.

When the "hostility" scores are related to responses that reflect conduct associated with automobile accidents, the correlation becomes more marked. As compared with the low "hostility" group, almost twice as many of those with high "hostility" think that a guilty driver should be punished, and they are relatively more positive about suing whenever possible. Thus, the "hostility" index is significantly related to some attitudes of injured persons about compensation systems. The relationships discussed above are shown graphically in Figure 8-9 for the low and high "hostility" groups.

If the index of "hostility" were actually related to people's aggressive behavior, then the individuals reporting extremely ag-

TABLE 8-28

*Characteristics of Respondents Who Were High and Low on the
"Hostility" Index
(for all serious or litigated cases)*

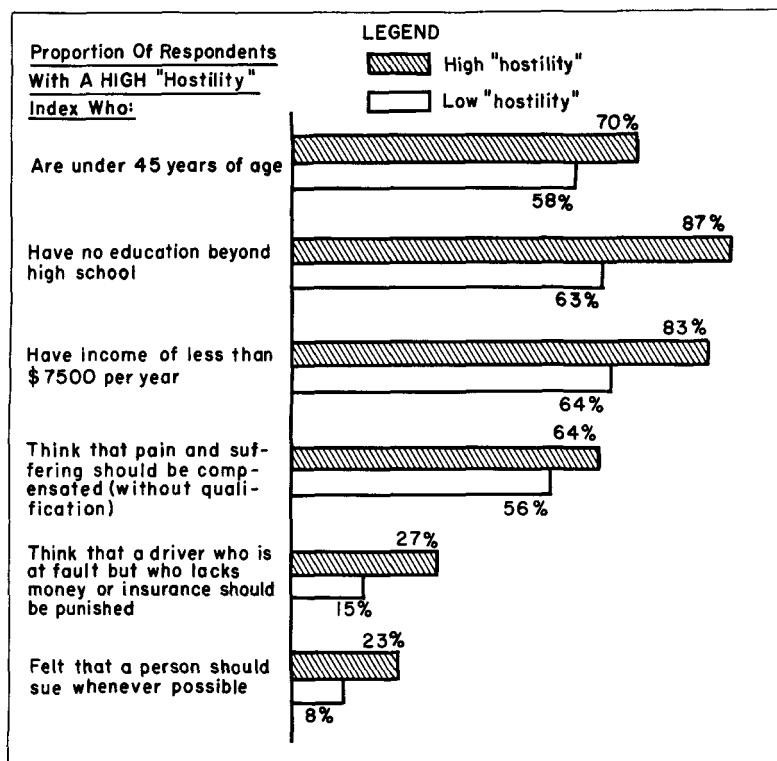
Among those who scored high on the "hostility index" (94 cases)

- 70 percent were under 45 years of age
- 87 percent had no education beyond high school
- 83 percent had incomes of less than \$7500
- 64 percent thought that pain and suffering should be compensated
- 48 percent thought that a driver who is at fault but lacks money or insurance should be punished or made to pay
- 23 percent thought that one should sue whenever possible

Among those who scored low in the "hostility index" (111 cases)

- 58 percent were under 45 years of age
 - 63 percent had no education beyond high school
 - 64 percent had incomes of less than \$7500
 - 56 percent thought that pain and suffering should be compensated
 - 30 percent thought that a driver who is at fault but lacks money or insurance should be punished or made to pay
 - 8 percent thought that one should sue whenever possible
-

FIGURE 8-9—VARIOUS CHARACTERISTICS RELATED TO THE
"HOSTILITY" INDEX
(Percentage distribution for all personal-interview respondents)



gressive behavior should be at the end of the "hostility" scale. To provide this kind of validation of the scale, Table 8-29 shows two groups:

1. Those who showed overt aggression by still trying to collect after a long time, refusing to sign the waiver to their lawyer, reporting that their lawyer wanted to settle earlier than they did, or suing in an accident involving only minor injuries. Some of this behavior might have been forced by circumstances, of course.
2. All other cases.

The first group does *not* have higher "hostility" scores than the remainder. Again the inference is that either hostility and aggres-

sion are two different things, or that the situation of a personal-injury automobile accident allows very little individual freedom of response; the situation being largely dominated by the law and the details of the case. On the other hand, the first group did report more dissatisfaction with the case and with the treatment they received from the other person's insurance company.

TABLE 8-29

*Characteristics of Respondents Who Did and Did Not Show
Any Overt Aggression in Their Behavior
(for all serious cases and all litigated cases)*

Among those who showed some overt aggression (84 cases)

- 49 percent thought they were treated unfairly by the other person's insurance company
- 46 percent were dissatisfied with the outcome of the case
- 54 percent were dissatisfied with the tort settlement they received (for those receiving a settlement)
- 21 percent had a high "hostility" score

Among those who showed no overt aggression (294 cases)

- 34 percent thought that they were treated unfairly by the other person's insurance company
 - 32 percent were dissatisfied with the outcome of the case
 - 47 percent were dissatisfied with the tort settlement they received (for those receiving a settlement)
 - 25 percent had a high "hostility" score
-

Are people who appear more "hostile" and suspicious also more likely to behave in certain ways after they are injured in an accident? Are they more likely to be dissatisfied with the outcome of the case? Correlations do not prove causation, because a traumatic and unsatisfactory accident and reparation experience might well reflect itself in the measure of hostility being used. But it is nonetheless interesting to see where there are relationships.

Comparing the 23 percent scored as "high hostility" with the 31 percent scored as "low hostility," the "high hostility" respondents were somewhat more likely to have seen a lawyer (73 percent

versus 59 percent), but the more interesting difference is that 8 percent of the "hostile" group did not hire the lawyer they saw, while the figure is close to 0 percent for the other group. This might be explained by the hypothesis that they were more likely to have gone to a lawyer without having had a legal case worth pursuing, and were discouraged by the lawyer from proceeding. Another hypothesis would be that their hostility prevented them from entrusting their case to a lawyer, or from agreeing to his terms for handling it.

On the other hand, once a lawyer was hired, there is no significant difference in the frequency of reported disagreements with the lawyer. There was no significant difference, either, in whether or not the individual received a settlement, or in the proportion of those reporting that there was someone from whom to collect, but who received no settlement. The "hostile" group were more likely to report that the individual responsible for their injury was not insured, and also were less likely to report that they did not know whether the other driver was insured, but these differences are not statistically significant. The group scored as "hostile" were somewhat more likely to have filed a suit (39 percent versus 28 percent).

The overall impression, then, is either that the measurement of personality differences was defective, or that the differences in behavior among people with different amounts of native hostility and suspicion are rather small, and tend to be dominated by the automobile accident situation and the lawyer's advice rather than personal idiosyncracies.

What about people's attitudes toward the whole process, and their satisfaction with the outcome? Are these feelings affected by their general view of life as well as by what actually happened?

Satisfaction with the way the case went was elicited by asking everyone: "Everything considered, how do you feel about the way your case went? Could you tell me a little more about it?" More of the "low hostility" group said they were satisfied (62 percent

versus 43 percent) and more of the "hostile" group said they were not (57 percent versus 38 percent).

<i>Attitude toward outcome of case</i>	<i>"Nonhostile," complacent</i>	<i>"Hostile"</i>
Satisfied	62%	43%
Dissatisfied	38	57
Total	100% (N = 111)	100% (N = 94)

Respondents not included above were either intermediate or ambiguous in their responses.

About two-thirds of both the "high" and the "low" "hostility" groups received a tort settlement. Satisfaction with the tort settlement was elicited by asking: "How do you feel about the amount you got? Was it fair in view of what happened, or too little, or quite generous, or what?" Eliminating those who got nothing, or had no opinion, the "hostile" group among the remainder was considerably more likely to say that the amount they received was inadequate.

<i>Attitude toward tort settlement</i>	<i>"Nonhostile," complacent</i>	<i>"Hostile"</i>
Generous, fair	51%	23%
Inadequate	49	77
Total	100% (N = 70)	100% (N = 50)

While the number of cases is quite small, these differences are statistically significant. The same pattern appears if one looks separately at the two samples, i.e., the serious cases from the police sample and the court cases (including some suits filed in nonserious cases).

Those who reported that their cases actually went to trial were few, but here again "hostile" respondents were much less likely

to report a fair hearing. The question was: "How do you feel about the *trial*—did your case get a fair hearing, or what?" Also, everyone was asked: "How do you feel about the way you were treated by the other person's insurance company?"

Some respondents, of course, had no dealings with the other person's insurance company or had no particular opinion, but among the rest, the "hostile" group were a little more likely to say that they were treated unfairly:

<i>Attitude toward other person's insurance company</i>	<i>"Nonhostile," complacent</i>	<i>"Hostile"</i>
Fairly	57%	39%
Unfairly	43	61
Total	100%	100%
	(N = 57)	(N = 51)

Finally, are there differences in satisfaction with the tort liability settlement or with the outcome of the case, after taking account of the ratio of net tort settlement to economic loss? Table 8-30 shows an interesting pattern for the three "hostility" groups. When the net tort settlement was less than half the total economic loss, all three "hostility" groups were equally likely to report that they thought it was inadequate. On the other hand, in cases where the net tort settlement was 151 percent or more of the total economic loss, the "high hostility" group was much less likely to report that the settlement was adequate. Table 8-30 excludes those who received no settlement either because there was no one else who was at fault or because the case was still unsettled.

Using the more general question "Everything considered, how do you feel about the way your case went?" as a measure of satisfaction, no particular relationship with the "hostility" index appeared (Table 8-31). The "low hostility" group were slightly more likely to be satisfied with small settlements in relation to economic loss and no more likely to report satisfaction with

TABLE 8-30

"Hostility" and Attitude Toward Tort Settlement Distributed by Net Tort Settlement as a Percent of Economic Loss (for serious or litigated cases in which a tort settlement was received)

<i>Hostility and attitude toward settlement^a</i>	<i>All cases</i>	<i>Net tort settlement as a percent of economic loss</i>		
		<i>1-50 percent</i>	<i>51-150 percent</i>	<i>151 percent or more</i>
<i>Low "hostility"</i>				
Generous, fair	51%	25%	58%	62%
Pro-con	0	0	1	0
Inadequate	49	75	41	38
Total	100%	100%	100%	100%
Number of cases	64	22	29	13
<i>Medium "hostility"</i>				
Generous, fair	48%	23%	63%	56%
Pro-con	3	0	3	6
Inadequate	49	77	34	38
Total	100%	100%	100%	100%
Number of cases	88	35	35	18
<i>High "hostility"</i>				
Generous, fair	22%	16%	41%	22%
Pro-con	5	7	0	4
Inadequate	73	77	59	74
Total	100%	100%	100%	100%
Number of cases	47	31	9	7

^a The question was: "How do you feel about the amount you got? Was it fair in view of what happened, or too little, or quite generous, or what? Why do you say this?"

relatively large settlements. The group with "low hostility" who received no settlement at all, however, reported themselves satisfied more often than the other two "hostility" groups.

In conclusion, broad questions designed to elicit general and perhaps persistent attitudes of hostility and suspicion appeared to produce a measure which was highly associated with more specific attitudes toward the accident and reparation experience, but which was not significantly associated with reported behavior. One reason

TABLE 8-31
 "Hostility" and Attitude Toward Outcome of Case Distributed by
 Net Tort Settlement as a Percent of Economic Loss
 (for all serious or litigated cases in which the respondent stated that
 there was someone from whom to collect)

<i>"Hostility" and attitude toward case^a</i>	All cases	Net tort settlement as a percent of economic loss				151 percent or more
		None (no settle- ment)	1-50 percent	51-150 percent		
<i>"Low hostility"</i>						
Satisfied	57%	52%	38%	63%	70%	
Pro-con	8	21	5	9	0	
Dissatisfied	35	27	57	28	30	
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	
Number of cases	74	10	22	29	13	
<i>"Medium hostility"</i>						
Satisfied	51%	23%	30%	83%	53%	
Pro-con	17	46	13	5	6	
Dissatisfied	32	31	57	15	41	
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	
Number of cases	113	25	35	35	18	
<i>"High hostility"</i>						
Satisfied	37%	6%	32%	59%	72%	
Pro-con	13	67	1	3	3	
Dissatisfied	50	27	67	38	25	
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	
Number of cases	57	10	31	9	7	

^a The question was: "Everything considered, how do you feel about the way your case went?"

may be the narrow range of choice most people have when settling a case, being forced to rely largely upon their lawyer's advice. Another reason might be that asking 30 to 60 minutes of questions about the accident and reparation experience just prior to asking "hostility" questions established some sort of a psychological set that carried over and influenced answers to "hostility" questions. Another reason may be that the questions tapped latent hostility and suspicion which is not necessarily associated with overt aggression.

In the search for explanations as to why people sue, the findings here are thus largely negative. Little of the difference between people can be attributed to differences in attitude or personality, perhaps because the measures are inadequate, but perhaps also because there is little room for individual choice in legal matters of reparation. It does not follow that the lawyers completely determine what happens. Group influences and common patterns may still help explain differences among parts of the country in the frequency of litigation. National studies which measure both individual and local area influences would have to be made in order to find out.

CHAPTER 9

Survey Methods: A Description

INTRODUCTION

This chapter describes the research design developed for the Michigan survey. Each of the independent components of the final design is presented separately, with emphasis on the underlying design considerations, sample composition, questionnaire content, and response and weighting characteristics for each. These discussions are preceded by a description and definition of the group of individuals (universe) being studied, as well as an overview of the total survey design. The present chapter also describes the "weighting" procedures used for the various parts of the study, the procedure used to substitute plaintiffs from the court sample for plaintiffs from the police sample, and the procedure used to estimate income loss for sampled individuals, and the techniques used to collect and process the data.

The following chapter evaluates the research design described here, placing special emphasis on the extent to which the assumptions and design specifications could have introduced serious inaccuracies into the final results.

A. THE UNIVERSE DEFINED

The universe (the total group of persons being studied) included all individuals injured or killed in automobile accidents that occurred in the State of Michigan during one calendar year, as well as noninjured drivers and owners involved in these accidents. The latter were included so that the estimate of the total economic loss resulting from personal-injury automobile accidents would include an accurate valuation of property damage which might have been compensated along with the personal injuries. To state this another way, the sample for this study was selected so that

inferences could be made about various characteristics of all personal-injury accidents occurring in Michigan during one calendar year. A calendar year, or some multiple thereof, was desirable in view of the fact that available Michigan and national traffic accident and court statistics are collected and published on a calendar year basis. The final sample is a statewide area probability sample which is representative of the universe of individuals as defined above.

B. SURVEY DESIGN: AN OVERVIEW

The survey design for this study includes two principal samples, one from police files and the other from court records. The first, which provides the basic sampling frame for the entire study, is a probability sample of automobile accidents which occurred in Michigan during 1958, and which were reported to either the Detroit Police Department or the Michigan State Police as having resulted in injury or death to one or more persons. This sample consists of 1118 accidents, which resulted in 2872 individuals being listed on police accident reports. The unit of analysis for most of the data presented in the report is the injured individual, not the accident.

Summary data concerning economic losses, injuries, and legal actions taken by these individuals were collected using a mail questionnaire, with a mail and telephone follow-up for those not responding.

The returns were grouped into three categories. The first category included individuals for whom the completed questionnaire provided adequate data for analysis; i.e., in terms of the purposes set forth for the study, it was felt that no additional data would be required from these individuals. Persons in this first category had medical expenses of less than \$500 and incurred no permanent physical disability or permanent impairment of ability to work.

The second category included individuals who either died as a result of the accident or who sustained complicated or "serious"

personal injuries—usually involving large medical expense, a permanent physical disability or both. For most of these individuals and their families, the accident marked a major turning point in their lives. Most of these individuals required extensive medical treatment, often followed by job retraining or rehabilitation. Serious financial difficulties were frequently encountered. For such persons, information provided by the mail questionnaire was not sufficiently detailed to permit a complete analysis of the accident and its consequences. Accordingly, these individuals were designated to be reinterviewed with a more detailed personal-interview schedule.

The third category of mail questionnaires consisted of those individuals who had retained a lawyer and who were involved in some kind of legal action at the time the questionnaire was completed. Since, at the time the respondents were asked to complete the mail questionnaires, the accidents being asked about were, on the average, only two years old, many of the legal actions were just being initiated, and very few had been completed. Persons involved in these legal actions would not be in a position to give complete cost and compensation data concerning their accidents until the cases had been settled. In fact, most of these persons had been instructed by their lawyers or insurance companies not to discuss the case with anyone. Since many of the cases would remain in litigation for another two or three years, it was decided to drop this group entirely and replace it with an independent sample of older automobile personal-injury cases, the majority of which would be settled.

In order to fill the gap created by this elimination and also to secure a broader sample of litigated cases, the second of the two principal samples for this study was used. It was a probability sample of automobile personal-injury suits filed in 1957 on the calendar of either a Michigan Circuit Court, the Kent County Superior Court, or a Federal District Court located in Michigan. Plaintiffs in the sampled cases were used to represent individuals

in the original police sample who were plaintiffs in a court action. The exact procedure used to substitute one sample for another is described in detail on pages 345-50 of this chapter, and the results of the substitution are evaluated in Chapter 10.

The plaintiffs in the court suits, the respondents returning mail questionnaires for whom additional data were desired, and a sample of those who had not responded to the mail questionnaire were combined into one personal-interview sample. Personal interviews were completed with 406 of the 564 designated respondents; 28 of the 406 were victims of nonserious accidents who had not returned the mail questionnaire.

The combined data provided by the questionnaires outlined above were considered sufficient to meet the purposes originally outlined for the study. However, in the course of processing the interviews, it was discovered that respondents were often unable to provide certain types of information asked for on the questionnaires. For example, in cases where insurance companies had paid hospital and medical bills directly, the injured individual or his family were frequently unaware of the amount paid. In other cases, the individual being asked about had been killed in the accident or had died since the accident, and the respondent was some other member of the family. Such respondents possessed varying degrees of knowledge concerning the facts of the accident; in some cases they knew nothing about injury costs incurred and compensation received.

After careful consideration of apparent gaps in the data, it was deemed desirable to secure certain types of information—particularly financial data—from other participants in the compensation process. Such data would provide missing information in some cases and verification of respondents' reports in other cases. Accordingly, a second research grant was secured for these purposes. The additional field studies undertaken are outlined briefly below in chronological order.

The first study included personal interviews with two groups of

claimants' lawyers. The first group included all lawyers shown on the sampled court records as representing plaintiffs, whether or not a personal interview had been obtained with the plaintiff. The second group included lawyers hired by those individuals sampled from police records who had both (1) completed a personal interview and (2) granted permission for their lawyer to be interviewed. There were 63 lawyers in this second group. Claimants' lawyers were questioned about legal proceedings and strategy, as well as about costs and compensation to both themselves and their clients. A few of the claimants' lawyers answered more than one questionnaire, because they represented more than one sampled plaintiff.

A second set of questionnaires was completed by telephone with the individual defendants shown on each sampled court calendar. The purpose of these interviews was not to determine the total effect of the accident on the defendant and his family, but only to examine the process by which the defendant undertook to defend himself and the direct consequences of the process itself. Each defendant was asked about his involvement in legal proceedings (including the manner in which he secured counsel) and about any psychic or economic losses incurred by himself or his family as a result of the suit.

A third study involved mailing a two-page questionnaire to each lawyer listed on the sampled court records as representing a defendant. Questions asked were parallel to questions already asked of plaintiffs' lawyers, but much fewer in number. They were primarily concerned with the major issues or sources of disagreement in the case and the important factors underlying determination of a final settlement. As among the plaintiffs, but to a much greater degree, some lawyers or law firms represented several of the defendants in the sample.

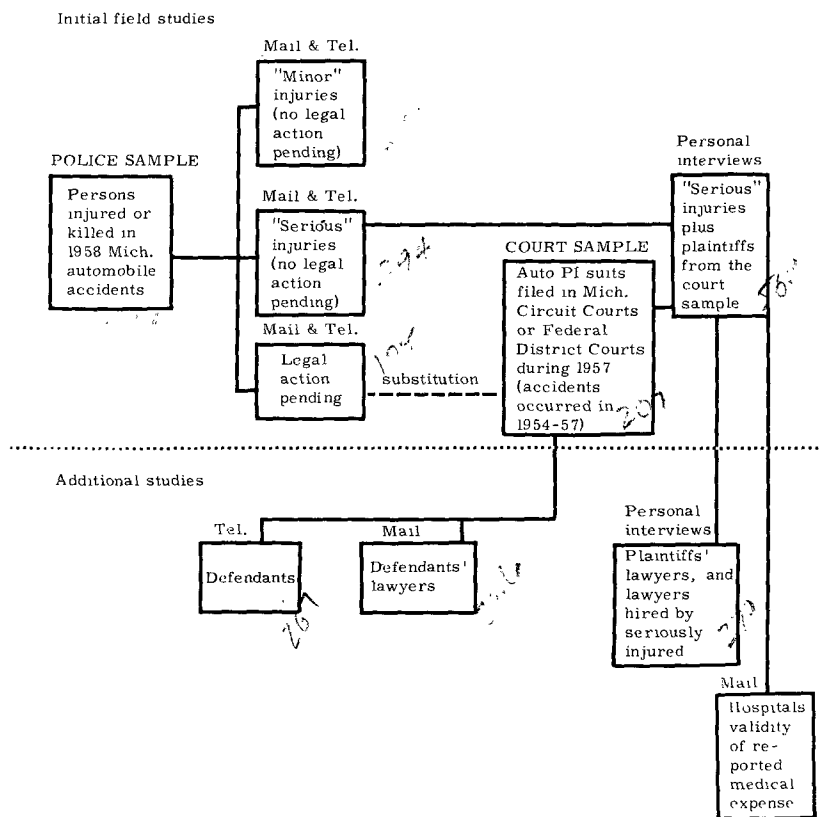
A final set of mail questionnaires was sent to all hospitals, clinics, or other medical institutions named by personal-interview

respondents as having treated or cared for the injured or deceased individuals. Hospitals were asked to complete a separate one-page questionnaire for each discharge subsequent to the date of the accident. Questionnaires asked about the total hospital bill for each visit, how much of the bill had been paid, and who paid it. These data have been used mainly to examine reporting bias.

Figure 9-1 summarizes the above overview. In the immediately following sections of this chapter, sample design, questionnaire content, and field results for each part of the study will be dis-

FIGURE 9-1

Study Design*



*Non-response groups omitted

cussed in more detail, followed by a description of the procedures used to combine the various parts of the study for analysis purposes.

C. THE POLICE SAMPLE

1. *Sample Design Considerations*

As previously indicated, the universe for the total study included all individuals injured or killed in automobile accidents that occurred in the State of Michigan during one calendar year. Before describing the study design actually used, a number of the more important problems encountered in making this definition operational will be outlined.

An important initial problem was that of locating an appropriate sample source. The "ideal" sample source—a complete listing of Michigan personal-injury auto victims—did not exist; however, three potential sampling sources were available. These were insurance company records, hospital reports, and police accident reports.

Insurance company records, however, do not include persons injured in an accident when the parties involved are not insured, nor do they include those injured in accidents not reported to the insurance company. And, in addition, since individuals involved in Michigan accidents are insured by many different companies (including some not having an office in Michigan), it would be difficult to select a sample representative of the universe as defined for this study.

Michigan hospital records also were found to have a number of serious deficiencies for purposes of sampling the defined universe. First, they list only individuals treated in a Michigan hospital; thus they exclude injured individuals going to a doctor's office or relying on self-treatment. (The Michigan survey shows that 15 percent of those listed as injured but not killed on police reports stated that they had not been treated by a doctor as a result of the accident.) Second, the hospital reports would have to be sub-sampled from a representative sample of Michigan hospitals. This

would involve negotiating for access to files with each sampled hospital on an individual basis. Policy regarding admission to files varies from hospital to hospital, as do the administrative procedures. The sampling procedures within any one hospital would have to be individually tailored to the record-system used.

Another crucial sampling problem within each hospital would have been that of identifying injuries resulting directly from automobile accidents. Such identification would have been based on the hospital's admitting diagnosis which might or might not make a direct reference to the automobile accident causing the injury. (It might be expected that lack of direct reference would be particularly prevalent in cases where the injury did not manifest itself for some time after the accident, or in cases where numerous hospitalizations were required for recovery.) It is conceivable, if not inevitable, that serious error would result from the actual mechanics of reading and classifying entries on the admission papers. And finally, in terms of the sampling the defined universe, error would be introduced by the fact that an individual injured in a Michigan accident could be hospitalized in another state, and an individual injured in another state could be hospitalized in Michigan.

For purposes of drawing a representative sample of individuals injured in personal-injury automobile accidents, police accident reports were considered deficient in only two minor respects. First, not all personal-injury accidents are reported to the police. Such non-reporting often occurs either because no police official is immediately available, or because the parties involved mutually agree to settle their differences, often to avoid a ticket. Second, many individuals do not become aware that they have been injured until after the police report has been completed and all parties have left the scene of the accident. This is often the case with minor back or internal injuries. Even though many of these accidents are reported to the police (as involving property damage), the individuals do not appear on the police reports as having been injured.

An evaluation of the above and other considerations indicated that the best available sampling source would be police accident reports. The major reasons for this decision are as follows. First, the actual selection of the sample could be accomplished by securing access to only two sets of records. Personal-injury and fatal accident reports for the City of Detroit are filed at Detroit Police Headquarters. Reports for the rest of the state are filed at State Police Headquarters in East Lansing. Second, the police reports offered the only sample source consistent with the defined universe. Third, the police accident reports are, by law, a matter of public record. (Accompanying documents, such as signed statements or police investigation reports, are not available to the public.) A discussion of the possible biases present in such a sample will be found in Chapter 10; it should be indicated here, however, that the biases have been evaluated as relatively small.

Before the sampling of police reports could be begun in Detroit and East Lansing, there remained the problem of which particular calendar year (or years) to study. Preliminary studies had indicated that a high percentage of all Michigan personal-injury automobile accidents reported to the police could not be considered "serious" when measured by any yardstick (e.g., number of days in the hospital, time lost from work, property damage, compensation received, etc.). The large majority of all personal-injury accidents appeared to be settled in a relatively few months after the accident. For "minor" accidents, it was felt that a long time span between the date of the accident and the date of interviewing would invite the possibility of serious error from memory distortion; it seemed likely that respondents would not be able to report accurately an event which had occurred a number of years in the past, and which was not important to them. Indeed, there also would be serious problems in locating individuals with very old address records.

The preliminary studies showed that a large fraction of the

economic loss incurred in personal-injury automobile accidents resulted from the relatively small number of "serious" accidents, many of which (particularly those going to court) required up to six or seven years to settle. For the purposes of this research, it was essential that most of the cases selected be settled at the time of the interview.

2. *Final Sample Design*

The final sample of police personal-injury reports is a statewide representative sample of accidents that took place during 1958. The actual sampling of police files resulted in the selection of 1118 accidents, which included 2872 individuals eligible for the study.

The basic *unit of analysis* around which the final research design was constructed is any individual listed on the sampled accident reports as having been injured or killed in an automobile accident that took place in Michigan during the 1958 calendar year.

The sample of police reports was drawn from two sources. The Detroit Police Department provided records for nonfatal personal-injury accidents that took place within the city limits, and the Safety and Traffic Bureau of the Michigan State Police provided records for nonfatal accidents taking place outside of Detroit and for all fatal accidents in the state. Nonfatal personal-injury accidents were selected using a sampling rate of one in forty-two; fatal accidents were sampled at a rate of one in six.

These police reports constitute the basic sample frame for this study. However, as indicated previously, one subset of eligible respondents listed on these reports was dropped for purposes of analysis, and a substitution was made using a sample selected from the Michigan courts. The court sample is discussed in detail in a subsequent section of this chapter.

D. MAIL AND TELEPHONE SCREENING INTERVIEWS

1. *Purpose*

Only a few personal-injury automobile accidents are serious. For most minor accidents, answers to a few factual questions will provide a relatively complete picture of the accident and its related costs. To avoid the high cost of conducting personal interviews with a large number of accident victims who had only minor injuries and who received little or no reparation, a screening questionnaire was mailed to all individuals sampled from police records. The questionnaire was designed to determine basic factual data concerning the extent of both the injury and the economic loss resulting from the accident. Individuals who did not return the first form were sent a second mail questionnaire, and those who still did not respond were telephoned by members of the Survey Research Center's field staff. For an analysis of the reliability of the screening questionnaire, see Chapter 10.

2. *Questionnaire Content and Eligible Respondents*

The mail screening questionnaire accompanied by a cover letter was sent to each eligible respondent believed to be living at the time of the mailing, and to the next-of-kin of individuals listed as fatalities on the police reports. In general, questionnaires asking about deceased individuals were sent to the "Informant" listed on the Death Certificate. (In Michigan, a photostat of the Death Certificate for each listed fatality is filed with the police accident report.) An accompanying letter explained the purpose of both the study and of selected questions on the questionnaire. It guaranteed the respondent anonymity and it instructed the respondent not to answer certain questions if a lawyer was still working to help collect money in connection with the accident. The questionnaire itself asked about medical treatment and medical expense, legal aid received and legal expense, the number of days lost from work, valuation of property damage, whether or not any permanent disability had been incurred, and the sources and amounts of

reparation received. In the case of fatalities, additional questions were asked about the age, education, and income of the deceased individual at the time of the accident.¹

The content of the telephone questionnaire was identical to that of the mail questionnaire; only the questionnaire format was altered to facilitate asking questions and recording answers by phone. If the injured individual was under sixteen years of age at the time of the interview, the interviewer was instructed to interview a parent or any other responsible adult with knowledge of the accident.

3. Results

The results of the initial screening are shown in Table 9-1. Of the 818 individuals by whom no questionnaire was completed 63 percent were never located, despite an extensive search of telephone books and city directories.

The screening questionnaire was not designed to provide complete information about seriously injured individuals. Further information was to be secured from them by personal interview.

TABLE 9-1

*Sample Size and Response Rate for Mail
and Telephone Screening Questionnaire*

	<i>Number of questionnaires</i>
<i>Number of questionnaires completed</i>	2054
By mail	1287
By telephone	767
<i>Number of questionnaires not completed</i>	818
Total sample	2872
Percent of questionnaires completed	71.5%

¹ Space prohibits the inclusion of most of the actual documents used in this research. However, copies of the cover letters, questionnaires, interviewers' instructions, editing worksheets, and codes for each part of the study have been micro-filmed, and copies of the film can be obtained from the Librarian, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan. (Reference: Supplement A, Michigan Automobile Study.)

For purposes of this study, a "serious" injury was defined as one which resulted in death, or resulted in medical bills of \$500 or more, or required hospitalization of three weeks or more, or resulted in some permanent impairment of ability to work. Two hundred ninety-four of the respondents who completed a screening questionnaire were classified as seriously injured and subsequently were designated for personal interviews. For the "minor" injuries, the data provided by completed mail or telephone questionnaires were considered to be sufficient for analysis. Additional personal-interview respondents were forthcoming from the Michigan court sample.

E. THE MICHIGAN COURT SAMPLE

1. *Sample Design*

Because of the recentness of the accidents, the police sample included a group of individuals who were still involved in some form of legal action at the time of the initial mail and telephone interviewing. These individuals might be expected to be either reluctant or unable to give complete cost and compensation data concerning the accident until legal actions were concluded. Rather than wait for completion of these proceedings, it was decided to draw a second sample of older personal-injury automobile accidents which involved court action. How was this substitute sample selected?

Initially, it was established that calendar year 1957 was likely to be the most recent year for which most cases commenced in that year could be traced to their final disposition. Therefore the universe for the court sample was defined as all personal-injury suits filed during 1957 on the calendar of either a Michigan Circuit Court, the Kent County Superior Court, or a Federal District Court located in Michigan.

In order to sample this universe, a number of important practical problems had to be overcome. First, there are no statistics available in Michigan which describe the universe as defined.

Statistics describing the business of the Michigan Circuit Courts are collected and published by the Administrator of State Courts. These statistics are broken down only among law, chancery, and criminal calendars. There are no figures available which describe the composition of civil litigation by type of case. In order to determine the proper sampling fractions for the Michigan court sample, a separate study, the Michigan Court Study,² was undertaken to examine the law and chancery calendars of Michigan Circuit Courts.

To insure efficient use of available funds, time, and research personnel, stratified probability sampling techniques were used (1) to select twenty-three counties in the state and (2) to sub-select 2411 cases from within these counties in such a manner that the cases included in the sample would be an unbiased representative sample of all cases filed in the state. Independent samples were drawn from the law and chancery calendars. In order that the final sample include about the same number of cases from each calendar, it was decided to sample one out of each sixteen cases filed on civil law calendars and one out of each twenty-eight cases filed on chancery calendars. Data from the court calendars were transcribed during February and March of 1960.

The final court sample included 1226 cases from the chancery calendar and 1185 cases from the civil law calendar. Of the civil law cases, 256 were filed to recover damages resulting from a personal-injury automobile accident. Since the court action for all but 11 of these cases had been completed at the time the sample was drawn, and since 256 cases were more than enough for the desired auto personal-injury sample, these cases were designated as the substitute sample.

To insure adequate representation of cases involving out-of-

² For a brief discussion of the results of this study, see Alfred F. Conard and Charles E. Voltz, "The Economics of Injury Litigation," Michigan State Bar Journal (August 1960).

state plaintiffs or the federal government, an additional sample was drawn from the three Federal District Court Divisions located in Michigan. The calendars of these courts indicate the cause for the complaint; consequently, the sample was taken from cases indicated on the calendar as personal-injury automobile accident cases. No winnowing of other kinds of cases was necessary. Selected at a rate of one in four automobile personal-injury cases, the final sample included 53 suits, of which three were still open at the time the sample was selected.

Thus, the composite court sample was made up of 309 cases—256 from the Circuit Courts and the Kent County Superior Court, and 53 from the Federal District Court Divisions. However, the budget would not allow inclusion of all these cases in the personal-interview sample, and a subsampling procedure was required. The cases were divided into two groups. The first included cases where the plaintiff filed for damages in excess of \$25,000. This group consisted of 123 cases and was included in the personal-interview sample with certainty, i. e., all 123 were designated for personal interviews. The second group included all cases in which the plaintiff filed for damages of \$25,000 or less. The 172 cases in this group were subsampled at a rate of one in two, with every other case ($N = 84$) being included in the personal-interview sample. The 14 "still open" cases were excluded from the personal-interview subsample, since it would not be proper to interview the persons concerned before a final settlement had been reached. The 14 cases are not represented in the analysis. The final personal-interview sample included 207 court cases. Table 9-2 summarizes the composition of the court sample. To the extent that the 14 "still open" cases are atypical, a bias is introduced. A follow-up could be completed on these cases at some future date.

The reader should be aware of one important methodological problem associated with combining data from the police and court samples. Michigan police reports include only accidents

TABLE 9-2
Composition of the Michigan Court Sample

Court	Time required to settle	Size of suit	Total	Number of cases	
				In personal-interview subsample	Not in personal-interview subsample
Circuit and Kent Superior	2 years or more	More than \$25,000	55	55	—
		\$25,000 or less	63	31	32
	Less than 2 years	More than \$25,000	43	43	—
		\$25,000 or less	84	40	44
Federal District	2 years or more	More than \$25,000	13	13	—
		\$25,000 or less	11	5	6
	Less than 2 years	More than \$25,000	12	12	—
		\$25,000 or less	14	8	6
Total number of cases			309	207	102

that occur within the geographic limits of Michigan. However, some Michigan accidents involve vehicles from other states; and it is possible that a Michigan resident would choose to sue an out-of-state motorist in the state of the latter's residence. On the other hand, any sample of automobile accident cases filed in Michigan courts will include some suits resulting from accidents which did not take place in Michigan. However, in this study both of the groups described are small relative to the total sample, and it is highly unlikely that any extensive biases are introduced by making the assumption that court cases filed in Michigan resulting from accidents occurring outside the state are equivalent to out-of-state court actions arising from Michigan accidents. For purposes of the analysis herein, this assumption has been made.

The procedures used to substitute plaintiffs from the court sample for plaintiffs from the police sample are described later in this chapter, and the effectiveness of the procedures is evaluated in Chapter 10.

F. PERSONAL INTERVIEWS WITH PLAINTIFFS AND PERSONAL INTERVIEWS WITH MAIL AND TELEPHONE RESPONDENTS REPORTING "SERIOUS" INJURIES

1. *Purpose*

Personal-interview questionnaires were designed to secure information concerning the consequences of serious or complicated automobile accidents, such as those involving death, serious injury, extended litigation, and large income losses.

The 564 respondents designated for personal interviews were selected from three sources. First, there were 292 "serious" cases from the mail and telephone screening interviews. Second, there were 207 plaintiffs from personal-injury automobile suits filed during 1957 on calendars of Michigan Circuit Courts, the Kent County Superior Court, or one of the three Federal District court Divisions located in Michigan. And third, in order to learn something about the characteristics of persons who did not return a

mail or telephone questionnaire, a subsample of 66 cases was selected from those not responding to the screening questionnaire. Since extensive effort had been already made to complete mail or telephone questionnaires with this group, it was evident that additional efforts to secure these interviews would represent a relatively inefficient use of resources; consequently, the sample selected was intentionally small.

2. Questionnaire Content and Eligible Respondents

In order to interview all eligible respondents, two different personal-interview schedules were required. An "A" questionnaire was designed to be used whenever the injured person, himself, was being interviewed; and a "B" questionnaire was designed for situations where someone other than the injured person was being interviewed, e. g., when the injured person was a minor child or deceased.³

For cases sampled from court calendars, interviewers were instructed to talk only with the plaintiff. No substitutions were allowed here. (Of course, the plaintiff may or may not have been the injured person.)

For cases sampled from police records, interviewers were instructed to talk only with the injured person, with the following exceptions. If the injured person had died prior to the interview (regardless of the cause of death), the interviewer was allowed to interview an adult member of the household at the time of the accident who had a reasonable knowledge of the facts. Substitution was also allowed if the injured person was twenty-one years old or younger at the time of the accident. Eligible respondents for these cases were classified into two groups. If the person injured was sixteen years old or younger at the time of the accident, the interview was obtained with either a parent or guardian. No other substitution was allowed for these cases. However, if the injured person was between seventeen and twenty-one years

³ The "A" questionnaire and portions of the "B" questionnaire are shown in Appendix B.

old (inclusive) at the time of the accident, the eligible respondent could be either the injured person or a parent or guardian, or the injured person's spouse.

In cases where individuals other than the injured person qualified as eligible respondents, every effort was made to complete the interview with the eligible respondent most knowledgeable about the facts of the accident.

3. *Results*

A summary of sample sizes and response rates for each of the personal-interview groups is presented in Table 9-3.

As shown in Table 9-3, personal interviews were completed with 33 of the 66 individuals in the nonresponse subsample. Two alternatives were available for using these completed interviews in analysis. First, they could be used to represent the entire mail and telephone nonresponse (that is, the 181 cases which did not respond to the screening questionnaire). Second, they could be used as a basis for completing a mail or telephone questionnaire for each respondent, which, in turn, would then be used in the same manner as the original mail and telephone response, that is, to determine if the injury was "serious" enough to qualify the respondent for a personal interview. The small subsample and the large weights that would be involved in the first alternative suggested that a serious bias might be introduced; consequently, the second alternative was chosen. Of the 33 completed interviews, 5 were "serious" and were included with the other "serious" personal interviews for weighting and analysis. The remaining 28 interviews were not "serious" and have not been used in the detailed analysis of personal interviews; but they have been used in conjunction with the mail and telephone returns for the analysis of all cases, thereby improving the response rate. The "adjusted" personal-interview sample, i.e., the one used for analysis, is presented in Table 9-4.

TABLE 9-3
Sample Sizes and Response Rates for Personal Interview Questionnaires

Sample source	Number of individuals sampled	Interview results		Percent of questionnaires completed
		Number of questionnaires completed	Number of questionnaires not completed	
"Serious" injuries from police sample	292	247	45	84.1%
Plaintiffs from court sample	207	126	81 ^a	60.9
Nonresponse subsample	66	33	33	50.0
Total sample	565	406	159	71.9%

^a Of the 81 plaintiffs for whom no questionnaire was completed, 62 could not be located.

TABLE 9-4
"Adjusted" Sample Sizes and Response Rates for Personal Interview Questionnaires

Sample source	Number of individuals sampled	Interview results		Percent of questionnaires completed
		Number of questionnaires completed	Number of questionnaires not completed	
"Serious" injuries from police sample	297	252	45	84.8%
Plaintiffs from court sample	207	126	81 ^a	60.9
Total sample	504	378	126	75.0%

^a Of the 81 plaintiffs for whom no questionnaire was completed, 62 could not be located.

G. COMPUTATION OF WEIGHTS FOR POLICE AND COURT RECORDS, AND MAIL, TELEPHONE, AND PERSONAL INTERVIEWS

Weighting is necessary when the cases or individuals in the universe have different chances of being drawn into the sample. In this study, for example, the sample of police records consists of every forty-second nonfatal accident record and every sixth fatal accident record. This means that every nonfatal accident selected represents itself and 41 other nonfatal accidents and every fatal accident represents itself and five other fatal accidents. To estimate a statistic for the state as a whole, data from each nonfatal accident record must be multiplied by forty-two and data from each fatal accident record must be multiplied by six. (See column 2, Table 9-5.)

A second weighting step, weighting for nonresponse, may be demonstrated by referring to columns 4 and 5 of Table 9-5. Using the first row as an example, note first that every forty-second nonfatal accident case was sampled. An attempt was then made to complete a mail or telephone interview with each of the 1462 individuals injured in these accidents. *If interviews had been completed with all 1462 people*, the data on each completed interview would have a weight of forty-two. However, only 1075 respondents (73.5 percent) actually completed and returned a questionnaire. These questionnaires were then "weighted up" to represent all individuals injured in Michigan nonfatal accidents during 1958. Thus, the original sample contained 1462 individuals, each representing himself and forty-one other injured persons. After the mail and telephone survey, the same number of injured persons (42×1462) was represented by 1075 completed interviews—each respondent representing himself and 57 ($42 \times 1462 \div 1075$) other persons injured in nonfatal accidents. The use of identical weighting procedures in all subgroups would implicitly assume that all nonresponse cases were alike and equal to the average of the responses. Such a procedure would be valid if the nonrespondents were similar to the respondents in regard to

TABLE 9-5
Response Rates and Determination of Interview Weights for Information from Police Records and for Mail and Telephone Interviews Completed by Respondents from the Police Sample

<i>Strata</i>	Initial sampling rate for police records (1)	Weight of information from each police record (2)	Number of individuals selected for mail or telephone interview (3)	Percent of mail and telephone questionnaires completed (4)	Weight of each completed mail or telephone questionnaire (5)
Injured	1/42	42	1462	73.5%	57
Noninjured driver	1/42	42	886	73.9	57
Injured or killed	1/6	6	416	76.4	8
Noninjured driver	1/6	6	108	66.7	9
Total sample			2872	73.8%	
			<i>Personal injury accidents</i>		
			<i>Fatal accidents</i>		

TABLE 9-6
Response Rates and Determination of Interview Weights for Personal Interviews Completed with Respondents from Police Sample

<i>Strata</i>	Weight of each completed mail or telephone interview (1)	Number of individuals selected for personal interview (2)	Personal interview response rates (3)	Weight of each completed personal interview (adjusted) (4)
Nonfatal accidents	57	120	88.3%	65
Fatal accidents	8	177	32.5	10
Total sample		297	84.8%	

TABLE 9-7
 Response Rates and Determination of Interview Weights for Information
 from Court Calendars and for Personal Interviews Completed with Plaintiffs
 from the Court Sample

<i>Time required to settle case</i>	<i>Strata</i>	<i>Size of suit</i>	<i>Initial sampling rate for cases (1)</i>	<i>Number of court cases sampled (2)</i>	<i>Weight for case information from the court calendar (3)</i>	<i>Sub-sampling rate (4)</i>	<i>Number of plaintiffs selected for personal interview (5)</i>	<i>Percent of personal interviews completed (6)</i>	<i>Weight of each completed personal interview (7)</i>
2 years or more	More than \$25,000		$\frac{1}{16}$	55	16	1	55	70.9%	23
Less than 2 years	\$25,000 or less		$\frac{1}{16}$	63	16	$\frac{1}{2}$	31	51.6	62
2 years or more	More than \$25,000		$\frac{1}{16}$	43	16	1	43	53.5	30
Less than 2 years	\$25,000 or less		$\frac{1}{16}$	84	16	$\frac{1}{2}$	40	70.0	46
<i>Circuit or Kent County Superior Court</i>									
2 years or more	More than \$25,000		$\frac{1}{4}$	13	4	1	13	61.5	6
Less than 2 years	\$25,000 or less		$\frac{1}{4}$	11	4	$\frac{1}{2}$	5	40.0	20
2 years or more	More than \$25,000		$\frac{1}{4}$	12	4	1	12	66.7	6
Less than 2 years	\$25,000 or less		$\frac{1}{4}$	14	4	$\frac{1}{2}$	8	25.0	32
<i>Federal District Court</i>									
Case still open				14			0	0.0	
Total sample				309			207	60.9%	

variables important for the study. To the extent that the two groups differ, potential bias exists, and weighting within subgroups can be expected to reduce it. Evidences of bias in this study are discussed in a later section of this book. (See Chapter 10.)

The same reasoning may be applied to the remaining strata in Table 9-5 as well as to the additional tables in this chapter, which show the response rates and weights for the remaining parts of the study.

H. SUBSTITUTION OF PERSONAL INTERVIEWS COMPLETED WITH PLAINTIFFS FROM THE COURT SAMPLE FOR PLAINTIFFS FROM THE POLICE SAMPLE

1. *Procedure for Designating Plaintiffs from the Police Sample*

In order to substitute the personal-interview court sample for plaintiffs from the mail-telephone study (See Figure 9-1, *supra*), it was essential to know which of the 2054 mail or telephone respondents had actually filed a suit. Preliminary drafts of the questionnaire had asked whether a suit had been filed, but experience gained in pretests showed that respondents frequently did not know whether a suit had been filed or not. All they knew was that they had put the matter in the hands of "my lawyer," or "my insurance company." The project staff therefore decided to ask the named lawyer or insurance company for suit information.⁴

It is recognized that an insurance company cannot properly represent a policyholder's personal-injury claim. However, it is probable that the counsel who represents the liability insurer of the injured person, or of the owner of the car in which the injured person was driving would know about any suits filed in connection with the accident. The injured person frequently does not perceive the counsel and the insurance company as two different organizations. This would be especially likely if two car owners

⁴ In view of the difficulties encountered in using this procedure, it may well be that in future studies the individuals should be asked directly whether a suit had been filed, and additional information sought only in cases where the individual cannot provide the necessary data.

are making claims against each other. Because of these considerations, the project staff decided to make inquiry of the insurance company named as "handling" the claim, rather than explaining to the injured person that he cannot be represented by an insurance company and seeking to get from him the name of the lawyer involved.

Before the lawyers or insurance companies were approached, the 2054 completed mail and telephone questionnaires were reviewed to determine which respondents could be reasonably classified as potential plaintiffs. The completed schedules clearly indicated that 1330 respondents had not been plaintiffs. The large majority of this group were eliminated because they answered "No" when asked, "Did you put your case (was the case put) in the hands of a lawyer or insurance company?" The problem, then, was to determine which of the remaining 724 respondents had filed as plaintiffs in a Michigan Circuit or Federal District Court.

If the name of the lawyer or insurance company had been provided by the respondent, a form letter accompanied by a return postcard (shown on the next page) was mailed to the designated party. The letter described the study's purpose, guaranteed the respondent anonymity, and explained both why it was necessary to know the information requested on the postcard and why it was felt that more accurate answers would be obtained from lawyers and/or insurance companies than from the sampled individuals.

Postcards returned by lawyers or insurance companies were sorted into three groups. First, if the completed postcard stated that the individual inquired about had not been a party to litigation of any kind, or had been a party to a suit brought in a lower court (but had not been involved in litigation brought in either a Circuit or Federal District Court), or had been a *defendant* in a suit filed in either a Circuit or Federal District Court, these cards were set aside. For purposes of the sample substitution, it was considered that these persons were not plaintiffs in litiga-

(Please check the <i>correct</i> answer)		SRC No.	
	1. Was the individual (named on accompanying letter) either a plaintiff or defendant in a suit filed on a Michigan court calendar?	Yes	No
IF YES TO #1	2. Plaintiff or defendant?	P	D
	3. In what court was the suit filed?		
	4. When? Month		Year
THANK YOU			

Postcard mailed to lawyers and/or insurance companies
named by mail or telephone respondents

tion brought in either a Circuit or Federal District Court. Second, if the completed postcard stated that the individual inquired about was a plaintiff in a Circuit or Federal District Court case, this was considered conclusive and the individuals represented by these cards became the nucleus of the police sample group that would be dropped in favor of the court sample. Third, if the name of a lawyer or insurance company was not given by the original respondent, or if the card was not returned by the lawyer or insurance company, or if the lawyer or insurance company could not provide the information requested, a form letter and postcard (similar to the card sent to lawyers) was sent to the original respondent. The cover letter thanked the individual for having previously completed either the mail or telephone questionnaire and explained that the additional information was needed in order to develop a complete statistical picture of the results of automobile accidents in Michigan. The postcards returned by this group were treated in the same manner as those returned by the lawyers or insurance companies.

The results of the mailing (at a cut-off date two weeks after the last letter had been mailed) are shown in Table 9-8. The fact

that the number of plaintiffs exceeds the number of defendants might be explained in a number of ways. First, it could be argued that a defendant who is also the plaintiff in a counterclaim would be more likely to return the postcard marked "plaintiff." Second, for accidents involving a number of individuals or vehicles, there are often more plaintiffs than defendants, i.e., if an individual is generally considered to be at fault, it is probable that he will be sued by a number of other persons. Third, it might be expected that mail or personal inquiries would present less of a psychological threat to plaintiffs than to individuals who have been accused of being responsible for the accident. And finally, although there may be a fifty-fifty chance that an injured person was at fault, there is a considerable chance that he did no damage to the other party, either because collision was with a fixed object (e.g., tree, ditch, or parked car) or because the other vehicle was less vulnerable (e.g., truck or railroad). Also it is well known that a seriously injured person is less likely to be sued because (1) the jury will sympathize with him, or (2) he is impoverished by the accident and can't pay.

TABLE 9-8
Designation of Plaintiffs in Police Sample: Results of Mailing to Lawyers, Insurance Companies, and Initial Respondents

<i>Results of mailing</i>	<i>Number of cases</i>	<i>Percent of sample</i>
<i>Postcard questionnaire was returned</i>	370	51%
Plaintiff in Circuit or Federal Court	38	5
Defendant in Circuit or Federal District Court	20	3
Party to a suit brought in a lower court	21	3
Not a party to litigation	256	35
Lawyer or insurance company could not provide the information requested	34	5
<i>Postcard questionnaire was not returned</i>	355	49
Total	<u>724</u>	<u>100%</u>

Table 9-8 shows that in 34 cases the postcards were returned incomplete, and in an additional 355 cases, the postcards were not returned. To effect the desired substitution, all 389 individuals asked about on these questionnaires had to be "assigned" to one of the three following categories: (1) plaintiff in Circuit or Federal District Court, (2) defendant in Circuit or Federal District Court, or (3) party to a suit brought in a lower court or not a party to any litigation.

The assignments were made by first examining all available information on each case, and where it seemed highly likely that the individual had not been a party to litigation, the individual was assigned to the third category.⁵ (Ten individuals were assigned using this procedure.) Next, on the basis of information available from the entire study, criteria were selected that could be used to associate an individual with one of the three categories. For example, all individuals arrested or cited for a violation were assigned to the "defendant" category on the basis of the fact that the large majority of defendants who did return a postcard questionnaire had been arrested or cited for a traffic violation. Insofar as possible, a number of variables were used to assign each case, and variables that were best able to discriminate among the three categories were given more weight in classifying the cases. This assignment procedure was continued until every individual had been included in one of the three categories. Of the 2872 individuals in the police sample 105, or 3.7 percent of the sample, were designated as plaintiffs in a Michigan or Federal District Court. Thirty-eight of these had returned the postcard questionnaire. Eleven were designated plaintiffs as a result of information available from the personal interviews, and the remaining 56 were assigned using the procedure just outlined.

As indicated on Figure 9-1, for analysis purposes the 105 plaintiffs from the police sample were dropped, and the plaintiffs from

⁵ Supplement A to this report describes the assignment procedure in more detail than is necessary here.

the court sample were substituted for them. Both the logic underlying this type of sample substitution procedure and the effectiveness of the substitution in this particular study are discussed in Chapter 10.

I. PERSONAL INTERVIEWS WITH CLAIMANTS' LAWYERS

1. *Purpose*

The claimants' lawyers' study was the first study completed under a grant from the Walter E. Meyer Research Institute of Law. As specified in the research proposal, the additional grant was obtained to pursue three principal objectives—first, to obtain data on heretofore unstudied questions, such as the legal problems that hinder prompt settlement of claims; second, to verify financial information already obtained from the initial personal interviews; and third, to provide information on methodology which would enable others to make future surveys of auto accident compensation with increased efficiency at a lower cost. The claimants' lawyers' study, along with the studies that will be described in the immediately following sections of this chapter, was designed to be combined with data obtained in the first part of the study to achieve these objectives.

2. *Questionnaire Content and Eligible Respondents*

Claimants' lawyers were questioned about legal actions taken on behalf of their clients as well as about the costs and compensation to both themselves and their clients. Following a detailed discussion of the specific case sampled, they were asked a number of general questions concerning their views about the way auto-injury cases presently are handled in Michigan and about the problem of court delay in Michigan.

The claimants' lawyers' sample was designed so that it could be treated as an independent study or combined with other parts of the total study for case analysis. To be more specific, claimants'

lawyers were selected from two sources. First, all the plaintiffs' lawyers listed on the sampled court calendars were included in the sample, regardless of whether or not an interview had been completed with their client. Second, lawyers hired by personal-interview respondents from the police sample were included only if their clients had given permission, either verbally or in writing, for the interview to take place. The composition of the claimants' lawyers' sample is shown in the first column of Table 9-9.

A further word should be said about the request for permission to interview lawyers. Each of the 378 personal-interview respondents who hired a lawyer was asked to sign a waiver of confidential privilege giving permission for his lawyer to disclose costs and legal issues in the case.⁶ If the personal-interview respondent was reluctant to sign the waiver, he was asked to give verbal permission for his lawyer to be interviewed. And if either verbal or written permission was given, he was asked for the name and address of his lawyer. Seventy-one percent of those asked to sign the waiver did so, and 87 percent of the lawyers listed on the waiver agreed to be interviewed. This compares with an overall response rate of 77 percent for all lawyers. (The precise sequence of questions is shown in Appendix B, questions F-14 to F-16.) A detailed evaluation of the effectiveness of waivers in securing interviews with lawyers is presented later in this chapter.

Returning to Table 9-9, consider again the two groups of eligible respondents. The 207 plaintiffs' lawyers who were listed on the sampled court calendars comprise a probability sample representative of all lawyers filing on behalf of plaintiffs in Michigan personal-injury automobile accident suits during one calendar year. For purposes of estimating state aggregates, each of these cases need only be weighted in accordance with both its initial

⁶ The use of a waiver was suggested by members of the advisory committee at a meeting of the committee in April, 1960. The committee felt that a signed release from a lawyer's client would substantially increase the overall response rate for this part of the study. The waiver was pretested in interviews with injured individuals or members of their families, and its use seemed to offer no significant interviewing problems.

TABLE 9-9
*Sample Sizes and Response Rates for Personal
 Interviews Completed with Claimants' Lawyers*

<i>Sample source</i>	<i>Number of lawyers sampled</i>	<i>Number of questionnaires completed</i>	<i>Number of questionnaires not completed</i>	<i>Percent of questionnaires completed</i>
Plaintiffs' lawyers listed on sampled court calendars	207	149	58	72.0%
Lawyers hired by personal- interview respondents from the police sample who granted permission for the lawyer to be interviewed	63	58	5	92.1
Total sample	<u>270</u>	<u>207</u>	<u>63</u>	<u>76.7%</u>

chance for inclusion in the sample (i.e., the sampling interval used to select the court calendars) and the personal-interview response rates. The response rates and determination of interview weights for this group are shown in Table 9-10.

The second group of eligible respondents shown in Table 9-9, the 63 lawyers hired by personal-interview respondents from the police sample, does not comprise a representative sample of any larger group. Therefore, the 58 completed questionnaires from this group have not been weighted nor have they been included in any of the quantitative material presented in earlier chapters; they have been used only for individual case studies. The quantitative material in this report is based entirely on the 149 questionnaires completed with the plaintiffs' lawyers listed on the sampled court calendars.

3. *Results*

The response rates for the two claimants' lawyers' groups are shown in Table 9-9. The questionnaire completion rate is noticeably higher for the lawyers hired by personal-interview respondents from the police sample than for plaintiffs' lawyers listed on the sampled court calendars. A comparison of the two nonresponse groups explains the difference. Table 9-11 shows why interviewers were unable to complete interviews with 58 of the plaintiffs' lawyers listed on the court calendars. Notice that twenty-six of the nonresponse interviews (44.8 percent) were never attempted. Nineteen of these "automatic nonresponse" were lawyers whose clients had either refused to be interviewed or had asked that no interview be attempted with their lawyers; although it was felt that interviews should not be attempted with the lawyers in these cases, the cases were included in the statewide plaintiffs' lawyers' sample by definition.

Ten additional plaintiffs' lawyers declined to complete the questionnaire because they could not remember details of the case and the case file could not be located. For all 10 of these cases,

TABLE 9-10
 Response Rates and Determination of Interview Weights for Information
 from Court Calendars and for Personal Interviews Completed with
 Plaintiffs' Lawyers from the Court Sample

Strata	Size of suit	Initial sampling rate for court cases (1)	Number of court cases sampled (2)	Weight for case information from the court calendar (3)	Sub-sampling rate (4)	Number of court cases in subsample (5)	Number of plaintiffs' lawyers selected for personal interview (6)	Percent of personal interviews completed (7)	Weight of each completed personal interview (8)
<i>Circuit or Kent Superior Court</i>									
2 years or more	More than \$25,000	$\frac{1}{16}$	55	16	1	55	55	72.7%	22
	\$25,000 or less	$\frac{1}{16}$	63	16	$\frac{1}{2}$	31	31	80.6	40
Less than 2 years	More than \$25,000	$\frac{1}{16}$	43	16	1	43	44 ^a	68.2	23
	\$25,000 or less	$\frac{1}{16}$	84	16	$\frac{1}{2}$	40	40	62.5	51
<i>Federal District Court</i>									
2 years or more	More than \$25,000	$\frac{1}{4}$	13	4	1	13	12 ^b	91.7	4
	\$25,000 or less	$\frac{1}{4}$	11	4	$\frac{1}{2}$	5	5	100.0	8
Less than 2 years	More than \$25,000	$\frac{1}{4}$	12	4	1	12	12	66.7	6
Case still open	\$25,000 or less	$\frac{1}{4}$	14	4	$\frac{1}{2}$	8	8	62.5	13
Total sample			309			207	207	72.0%	

^a Court case No. 8112 was treated as two separate interviews.

^b Court case No. 8131 was removed from sample (case reopened).

TABLE 9-11
Reason Why Questionnaire Was Not Completed
with Plaintiff's Lawyer, Court Sample

<i>Reason why questionnaire was not completed</i>	<i>Number of questionnaires not completed</i>	<i>Percent of questionnaires not completed</i>
Interview never attempted (automatic nonresponse)	26	44.8%
Plaintiff refused to be interviewed	11	
Plaintiff asked us not to talk with his lawyer	8	
Respondent (plaintiff's lawyer) is ill or deceased, or moved out of state, or current address could not be determined	5	
Other reasons	2	
Interview refused by respondent (by reason given):	18	31.0
Respondent too busy; cannot afford time	4	
Respondent will not complete interview until a release from his client is obtained	8	
Respondent presently under suspension by Michigan Bar	2	
Case still open	1	
Other reasons	3	
Interview prevented by unavailability of respondent's case file (by time between accident and interview):	10	17.3
Less than four years	—	
Four years, but less than five years	2	
Five years, but less than six years	6	
Six years or more	2	
Respondent absent (out of state or country) during interviewing period (no one else available to complete questionnaire)	4	6.9
Total questionnaires not completed	<u>58</u>	<u>100.0%</u>

the accident inquired about had occurred at least 4 years prior to the interview. The two groups just discussed account for 62.1 percent of the nonresponse. The remaining 37.9 percent of the nonresponses are classified by reasons common to all field surveys—they were either refusals or cases where the designated respondent was absent from the state or country during the interviewing period.

For comparison, a number of explanations might be suggested for the extraordinarily high proportion of questionnaires that were completed with lawyers hired by personal-interview respondents from the police sample. First, compared with the court sample, the recentness of the accidents considerably reduced the chance of the file not being available or of the lawyer not being able to remember the case. Second, in all the cases included in this group, the lawyer's client had previously been interviewed and the client had given his verbal or written consent for his lawyer to be interviewed. It will be shown shortly that securing permission from the client did increase the response rate with lawyers. A summary of the reasons given for the five nonresponses in this latter group is shown in Table 9-12.

TABLE 9-12

*Reason Why Questionnaire Was Not Completed
with Claimant's Lawyer, Police Sample*

<i>Reason why questionnaire was not completed</i>	<i>Number of questionnaires not completed</i>
Interview never attempted (automatic nonresponse)	2
Interview refused by respondent	1
Interview prevented by unavailability of respondent's case file	1
Other (respondent is not an attorney, although he did give claimant legal advice)	1
Total questionnaires not completed	5

4. *A Note Concerning the Effectiveness of Waivers*

Tables 9-13 and 9-14 indicate that the securing of a client's permission to interview his lawyer does substantially increase the probability of completing an interview with his lawyer. In Table 9-13 the bottom row (which shows the response rate for interviews that were assigned to the field, i.e., the results for all cases where an interview was actually attempted) indicates that about 90 percent of the interviews were completed when the interviewer had a signed waiver available to show the lawyer, that about 87 percent of the interviews were completed when the interviewer could state that the client had given his verbal permission for the interview to take place, but that only about 72 percent of the assigned interviews were completed when the client's permission had not been secured.⁷

Looking at both Tables 9-13 and 9-14, it appears that the fact of having permission is more important than the form in which the permission is given. There is essentially no difference between the response rates for lawyers who were presented with a signed statement and lawyers who were simply told that their client had granted permission for the interview. Moreover, Survey Research Center interviewers were instructed to leave the waiver with the lawyer if he so requested; most lawyers gave the statement merely superficial attention and returned it to the interviewer. From the evidence presented here, one would conclude that securing a claimant's permission to interview his lawyer did contribute to the overall response rate; but the evidence does not suggest that the use of a waiver produced significantly better results than did the securing of verbal permission only.

⁷ It should be kept in mind, however, that 8 of the 31 nonrespondents in this third group (See Table 9-11.) told the interviewer that they would complete a questionnaire if the signed release could be obtained. It is entirely possible that these 8 attorneys might have completed the questionnaire if the issue of waivers had not been emphasized in both the introductory letter to the lawyer and in the introduction to the personal interview. If this had been the case, the response rates in the three groups would have been almost equal. On the other hand, it is equally possible that lack of permission in one form or the other could have substantially reduced the response rate in the first two groups.

TABLE 9-13

Personal Interview Results with Plaintiff's Lawyer by Personal Interview Results with Plaintiff and by Whether Plaintiff Signed a Release, Court Sample

<i>Personal interview results with plaintiff's lawyer</i>	<i>Personal interview results with plaintiff</i>				
	<i>Questionnaire completed</i>				
	<i>Permission to interview lawyer granted</i>		<i>Permission to interview lawyer refused (interview never assigned)</i>		
<i>All cases</i>	<i>Release signed</i>	<i>Release not signed</i>	<i>Release signed</i>	<i>Questionnaire not completed</i>	
<i>Number of lawyers' questionnaires</i>	207	86	32	8	81
Number of lawyers' questionnaires completed	149	73	26	—	50
Number of lawyers' questionnaires not completed	58	13	6	8	31
Not completed because interview never assigned; (See Table 9-11)	26	5	2	8	11
Percent of questionnaires completed (all cases)	72.0%	84.9%	81.3%	0.0%	61.7%
Percent of questionnaires completed (excluding interviews never assigned)	82.3%	90.1%	86.7%	—	71.4%

TABLE 9-14
 Personal Interview Results with Claimant's Lawyer by
 Whether Claimant Signed a Release, Police Sample

Personal interview results with claimant's lawyer	Whether claimant signed a release ^a	
	All cases	Release signed
Number of lawyers' questionnaires sampled	63	15
Number of lawyers' questionnaires completed	58	14
Number of lawyers' questionnaires not completed (for any reason)	5	1
Percent of questionnaires completed (all cases)	92.0%	93.3%

^a All respondents granted permission for Survey Research Center interviewers to talk with their lawyers about the case.

J. TELEPHONE INTERVIEWS WITH DEFENDANTS

1. *Introduction*

A second empirical study completed under the Meyer Grant involved the completion of telephone questionnaires with defendants listed on the sampled court calendars. In developing the research design for this part of the project, a number of problems were encountered, the most important of which are discussed briefly here.

Corporations named as defendants were excluded from the sample for a number of reasons. First, the interviewing schedule designed to be completed with individual defendants was not appropriate for interviewing corporation officials, and there were not enough corporations in the sample to justify a separate analysis. A less important reason involved the practical difficulty of locating the individual within a corporation's claims office who handled a particular case. More important, if the individual could be located, the information asked of him would have been essentially the same as that requested on the defendants' lawyers' questionnaire for the same case. In fact, in many cases the corporation's claims representative and the defendant's lawyer would have been the same individual. Governmental units named as defendants were also excluded from the sample for similar reasons.

Multiple defendants offered an additional design problem. The unit of analysis had been defined as all defendants listed on the court calendars. For cases where two or more related individuals living together were named as joint defendants, such as a married couple, the interviewer was instructed to complete first a regular questionnaire with either of the individuals named as a defendant. A shorter supplemental questionnaire was then completed for each additional family member named as a defendant. The supplemental form repeated only those questions from the regular questionnaire for which the answers would be expected to vary between members of the same family, such as whether the person was driving at the time of the accident and the basic demographic

data. Interviewers were permitted to complete the supplemental questionnaires with either the original respondent or with the family member being asked about. A review of the interviewing results shows that all the supplemental questionnaires were completed with the original respondents.

If a defendant had died between the time the suit was filed and the interviewing period (regardless of the cause of death), the interview was assigned as an automatic nonresponse; that is, no alternative respondent was allowed. In suits where the defendant was the administrator of an estate, the interviewers were instructed to alter the wording of selected questions on the regular questionnaire by hand, so that the questions asked administrators would be consistent and appropriate.

Use of the most economical data-collection technique was also given careful consideration. A pretest in Detroit indicated that the schedule could be completed by telephone with little difficulty, and it was decided to attempt the initial defendants' interviews by telephone, with the option of switching to personal interviews if any serious difficulties were encountered in the telephone procedure. Early interviews were assigned with out-of-state respondents who, in most cases, would have been assigned as automatic nonresponses using personal-interview techniques. These interviews were successful, and a second group of interviews were assigned with respondents in outlying areas of Michigan (these respondents would have represented high-cost personal interviews), and finally the entire sample was assigned for telephoning.

2. Questionnaire Content and Eligible Respondents

The defendants' questionnaire was designed to examine the process by which respondents defended themselves. Every effort was made to separate aspects of the defense process from other aspects of the accident, such as medical expenses, property damage, etc., incurred by the defendant or his family. An effort also

was made to focus the respondent's attention on issues relevant to the particular suit sampled, as opposed to other suits that might have been brought against the defendant or his family as a result of the same accident. The questionnaire itself asked about the defendant's involvement in legal proceedings (including the manner in which he secured counsel), and about any psychological and economic penalties incurred by himself or his family as a result of the suit.

3. Results

The response rates and the determination of interview weights for completed defendants' questionnaires are shown in Table 9-15. Note that even with the exclusion of private corporations and governmental units, there were 267 individual defendants listed on the 207 sampled court calendars. The same 207 calendars listed 207 plaintiffs (Table 9-7); thus, the court calendars listed about 1.29 defendants for each plaintiff.

The mobility of American families, particularly younger families, increases the problem of tracing respondents when the respondents (and their addresses) are selected from a list that is not current. Table 9-16 indicates clearly that the effectiveness of the procedures used to locate defendants was important in establishing the over-all response rate for this part of the study. Of the 267 defendants designated for personal interviews, 55 (65.5 percent of the nonresponse group) could not be located; no interviews could be attempted with this group.⁸ Table 9-16 also shows

⁸ The reader may be interested in a brief description of the procedures used to locate sampled defendants. An initial effort was made to find some known address for each defendant, regardless of how old it was. Court records provided complete 1957 addresses for about one-half the sample; however, for most of the remaining defendants, the 1957 city of residence was mentioned somewhere in the court records. Current (1961) telephone books were checked next, and if the 1957 address found in the court records and the address shown in a current telephone book were the same, the questionnaire was assigned for interviewing. For cases where the court records indicated only a city of residence, the current telephone book for that city was checked, and if an individual with the same name as the defendant was listed in the telephone book, and there was some reason to be

that only 8 of the defendants refused to be interviewed by telephone.

K. MAIL INTERVIEWS WITH DEFENDANTS' LAWYERS

1. *Introduction*

A final empirical study required interviewing all defendants' lawyers listed on the sampled court calendars, using a two-page mail questionnaire. This study was undertaken so that the views of all major participants in the litigation process would be included in the final report, thus permitting comparisons on a case-study basis. Although the personal-interview questionnaire used with plaintiffs' lawyers is much more detailed than the mail questionnaire used with defendants' lawyers, the nine questions included on the defendants' lawyers' questionnaire were also asked of the plaintiffs' lawyers. The questions are primarily concerned with the major issues or sources of disagreement in the case and the important factors underlying determination of a final settlement.

The principal factor which limited the length of the defendants' lawyers' questionnaire and dictated the use of a mail questionnaire was the concentration of a large percentage of the defense work in a relatively few firms. In most instances, these firms are affiliated with one of the insurance companies writing large amounts of automobile insurance in Michigan. Table 9-17 compares the concentration of defense lawyers with the concentration of plaintiffs' lawyers for the 207 sampled court cases. It is quickly apparent that a relatively few law firms handle a large propor-

confident that the telephone listing was that of the defendant (e.g., if there was only one individual with the defendant's name listed in the telephone book, or if a telephone book listing showed the same last name and the same address as shown on the court records, but perhaps a different first name), the questionnaire was assigned for interviewing.

For defendants still not located, additional efforts were made to find the police report for the accident (which might list either the the address of the defendant or the name and address of an individual who would know the present whereabouts of the defendant). Further investigation was carried out at the R. L. Polk Library in Detroit and at the Michigan Drivers' License Bureau in Lansing. Some success was achieved through each of the sources mentioned.

TABLE 9-15
*Response Rates and Determination of Interview Weights for Information
 from Court Calendars and for Telephone Interviews Completed with
 Defendants from the Court Sample*

<i>Time required to settle case</i>	<i>Strata</i>	<i>Initial sampling rate for court cases (1)</i>	<i>Number of court cases sampled (2)</i>	<i>Weight for infor- mation from court calendar (3)</i>	<i>Sub sampling rate (4)</i>	<i>Number of court cases in subsample (5)</i>	<i>Number of defendants selected for personal interviews (6)</i>	<i>Percent of personal interviews completed (7)</i>	<i>Weight of each completed personal interview (8)</i>
2 years or more	More than \$25,000	1/16	55	16	1	55	77	68.8%	23
	\$25,000 or less	1/16	63	16	1/2	31	42	76.2	42
Less than 2 years	More than \$25,000	1/16	43	16	1	43	64	68.8	23
	\$25,000 or less	1/16	84	16	1/2	40	51	70.6	45
2 years or more	More than \$25,000	1/4	13	4	1	13	13	38.5	10
	\$25,000 or less	1/4	11	4	1/2	5	5	100.0	8
Less than 2 years	More than \$25,000	1/4	12	4	1	12	11	72.7	6
	\$25,000 or less	1/4	14	4	1/2	8	4	0.0	—
Case still open			14			0	0	0.0	
Total sample			309			207	267	68.5%	

* Private companies and governmental units were excluded from this sample. (There are 15 such cases in the 38 cases sampled from the Federal District Courts.)

TABLE 9-16

*Reason Why Questionnaire Was Not Completed
with Defendant, Court Sample*

<i>Reason why questionnaire was not completed</i>	<i>Number of questionnaires not completed</i>	<i>Percent of questionnaires not completed</i>
Respondent refused to be interviewed (does not want to talk about it; too upset; too busy; can't remember details)	8	9.5%
Respondent ill or deceased (no one else available to complete questionnaire)	16	19.0
Respondent absent (out of state or country during interviewing period; no one else available to complete questionnaire)	5	6.0
Respondent could not be located (unable to determine current address or telephone number)	55	65.5
Total questionnaires not completed	84	100.0%

tion of all defense work for Michigan automobile suits. To be more precise, the survey indicates that five law firms handle 38 percent of all the defense work resulting from Michigan personal-injury automobile suits. (One law firm accounted for 36 percent of the total nonresponse for this part of the study.) With this heavy concentration of defense work, it seemed unreasonable to expect that the lawyers involved would be willing, or should be asked, to complete more than a few questions about any one case. These considerations led inevitably to the conclusion that the final questionnaire should be short and that the respondent should be allowed to complete the schedules as his time permitted. Of course, if it had not been essential to interview about the specific

TABLE 9-17

Concentration of Cases for Sampled Plaintiffs' and Defendants' Lawyers, Court Sample

<i>Number of sampled cases handled by lawyer or law firm</i>	<i>Whether lawyer or law firm represented plaintiff or defendant</i>	
	<i>Plaintiffs</i>	<i>Defendants</i>
1	87%	72%
2—3	11	15
4—6	2	7
7—9	0	1
10—12	0	2
13—15	0	1
16—24	0	1
25 or more	0	1
Total	100%	100%
Total number of lawyers or law firms in sample	215 ^a	102
Range of number of cases handled by single lawyer or law firm	1—5 cases	1—28 cases

^a A small number of these lawyers were not listed on the 207 sampled court calendars, but were interviewed when it was subsequently determined that they played a major role in settling the case.

cases in the court sample, the sample would have been designed to avoid the extreme clustering of interviews evident here. But an efficient representative sample would still be concentrated to some extent in certain law firms because the cases are concentrated in these firms.

2. Results

The response rates and determination of interview weights for interviews completed by defendants' lawyers are shown in Table 9-18.

L. ESTIMATION OF ECONOMIC LOSSES

1. Introduction

For the purposes of this study, comparing losses with compensation, it is the loss to the individual or his family which is relevant,

TABLE 9-18
Response Rates and Determination of Interview Weights for Information from Court Calendars and for Mail Interviews Completed with Defendants' Lawyers from the Court Sample

Strata		Initial sampling rate for court cases (1)	Number of court cases sampled (2)	Weight for case from the court calendar (3)	Sub-sampling rate (4)	Number court cases sub-sample (5)	Number of defendants' lawyers selected for mail interview ^a (6)	Percent of mail questionnaires completed (7)	Weight of each completed mail questionnaire (8)
<i>Circuit or Kent Superior Court</i>									
2 years or more	More than \$25,000	1/16	55	16	1	55	69	73.9%	22
	\$25,000 or less	1/16	63	16	1/2	31	36	72.2	44
Less than 2 years	More than \$25,000	1/16	43	16	1	43	47	61.7	26
	\$25,000 or less	1/16	84	16	1/2	40	43	60.5	53
<i>Federal District Court</i>									
2 years or more	More than \$25,000	1/4	13	4	1	13	15	66.7	6
	\$25,000 or less	1/4	11	4	1/2	5	8	50.0	16
Less than 2 years	More than \$25,000	1/4	12	4	1	12	12	66.7	6
Case still open	\$25,000 or less	1/4	14	4	1/2	8	6	50.0	16
Total sample			309			207	236	66.5%	

^a Private companies and governmental units were excluded from this sample. (There are 15 such cases in the 38 cases sampled from the Federal District Courts.)

not the loss to society. At the same time it is the gross loss to the individual, with no deductions for such offsets as insurance benefits (private or social). And the loss of future earnings counts even when a man with no legal dependents is killed, on the argument that everyone has some potential beneficiaries somewhere, and because it seems inequitable to distinguish between those with and without immediate dependents in estimating losses.

2. *Property Damage*

There are no conceptual difficulties in estimating the property damage losses. The cost of repairing or replacing provides a basic rule. In practice, the individual may repair something that would have been cheaper to replace and may secure enough compensation to do so. He might replace rather than repair, though usually at his own extra expense. And he might prefer to leave the damage unrepaired, particularly if he is allowed to keep the cash.

For the minor accidents, using only the mail questionnaire, the estimate of property damage relied upon a single question: "How much damage was done to your car or other property?", with the respondent checking a box indicating the amount. There was a box indicating no damage, and another indicating that the respondent's car was not involved.

The personal interview asked a series of questions, on pre-accident value of the car, cost of repairs, amount received if the car was sold, and towing or storage charges. Since there were also police report estimates of damage, and the value of the car could be estimated from its make and year model, property damage estimates could be made even where the respondent was unsure.

3. *Medical Costs*

There may be problems in determining whether the medical care received was directly a result of the automobile accident in

question. However, most individuals will probably receive only the medical care required as a result of the accident, and the problem is merely to ascertain its cost.

In the mail questionnaire a single question was asked: "How much was the total expense for your medical and hospital care (regardless of who paid for it)?" However, in the personal interview, a sequence of 27 questions was asked about medical costs, some questions repeated for each hospital involved. Included among the questions were inquiries concerning expected future medical expense.

4. Miscellaneous Costs

Questions were asked about legal fees in both the mail questionnaire and the personal interview. The personal interviews also asked about other expenses, such as extra household help, other auto expense, and other collection expenses.

5. Income Loss

The most complex, and the largest, loss for those who are disabled, even temporarily, is lost income. Estimating future income loss involves projections into the future of an individual's employment status and his earning rate, as well as his life expectancy.

There are a number of conceptual and practical problems in estimating the value of lost income. The following discussion will indicate how they were handled in making loss estimates for this study.

(1) Income varies in different patterns over a man's lifetime, depending largely upon his education. Hence it is useful to take earnings of people of different ages and education levels rather than to extrapolate current earnings over an expected work life.

(2) Some people become unemployed or disabled or do not work full time for other reasons. Hence, it is better to take aver-

age earnings for groups which include the unemployed or partly employed.⁹

(3) Women marry and move into and out of the labor force. When taking care of a household and rearing children, they are economically productive, but since no money wage is involved it is difficult to estimate a proper "imputed wage." For a group of young females not presently employed, rather than estimate the number of years each one will work, the average wage, and the imputed earnings for activities involving no money wage, it is simpler and not very inaccurate to take a conservative estimate like \$3000 a year as the average value of a woman's work.¹⁰

(4) What is a proper work life, and should one take account of the probability of death or total disability (removal from the labor force) from *other* causes before retirement? There are tables of working life, but it is a close approximation to assume that a man will work until age sixty-five—a growing proportion retire at this age.¹¹ For women, who generally do housework throughout their lifetime, a work life expectancy of seventy-five appears more reasonable. The expected age at death for a white female advances as her age advances, but starts at seventy-four and only advances to about seventy-nine. Since losses must be estimated for one individual at a time, such an expected value seems reasonable. In fact, since the total estimated wage loss must be discounted back to present values, a few years more or less at the end of such a period make no appreciable difference.

(5) Should the cost of maintaining the individual who is pro-

⁹ This is conservative. Do auto accidents really cost less where there is unemployment? Should unemployment loss be used to reduce the estimated cost of accidents? Whatever the ultimate answers to these questions may be, it seemed proper in estimating loss *to the individual and his family* to allow for the possibility of some unemployment losses even if the accident had not occurred.

¹⁰ Marie G. Gage, "The Work Load and Its Value for Fifty Homemakers, Tompkins County, New York" (unpublished Ph.D. dissertation, Cornell University, 1960).

¹¹ Bureau of Labor Statistics, Tables of Working Life (Bulletin #1001, U.S.G.P.O., 1950).

Bureau of Labor Statistics, Tables of Working Life for Women (Bulletin #1204, U.S.G.P.O., 1957).

ducing the earnings be deducted? From the point of view of the rest of the family, certainly such a deduction is reasonable. Otherwise, a death would be treated as identical to a total permanent disability, where the individual has to be supported for the rest of his life.

From the point of view of society, is consumption a cost of production, or part of the social product? Can some minimum subsistence be defined as a cost of production, and the rest considered a reward—a net contribution to total satisfaction—whether consumed by the producers or by someone else? In evaluating the costs of mental illness Rashi Fein has argued that all consumption is to be included in the loss, since consumption is, after all, the purpose of the economy.¹² Acceptance of this argument would lead to the inclusion of all lost production as part of the total accident cost, whether the individual is dead or alive. The Michigan survey follows the alternative course of deducting \$2000 a year as maintenance cost, a conservative procedure and one which is more directly related to the amount of compensation necessary to offset the damage.¹³

People with higher incomes will consume a great deal more than enough for mere subsistence. The assumption is, however, that anything above subsistence necessary to preserve life and health is clearly enjoyment of the fruits of labor and its disappearance a clear loss. No distinction is made, then, between a man who consumed all his income, and a man who consumed very little of it. *Someone* consumed the income, and its disappearance constitutes a loss to someone. If the one who consumed it is dead, the loss remains.¹⁴

¹² Rashi Fein, *The Economics of Mental Illness* (New York: Basic Books, 1958), pp. 14, 18.

¹³ *Life Study of Consumer Expenditures*, Vol. I (New York: Time, Inc., 1957). See this for actual expenditures which are higher, of course.

¹⁴ *Life Study of Consumer Expenditures*, *op. cit.*

¹⁴ If one focuses only on needs of survivors, then it may be useful to count only that part of the deceased's earnings which he would not consume himself, i.e., that would have been available for others and is no longer available. In this case, the needs depend on family size—the larger the family, the larger is the proportion of

(6) Lost income stretches into the future; should it be discounted to present value? To estimate the annual cost of accidents, it might be best to add up the total loss without discounting, on the following argument. Any year's cost is made up of the continuing cost of past accidents and this year's cost of this year's accidents. One may, however, substitute the future cost of this year's accidents for the present cost of past accidents. (A sample of all the accidents still costing something in one year would provide complete coverage, just as would a sample of all the accidents starting a stream of costs in any one year, providing the total level of accidents is relatively stable.)

The major purpose of the present study, however, is to compare costs with compensation, and for this purpose, the relevant data are those concerned with this year's accidents and current compensation. Thus, future losses must be discounted to a present value.

What is a proper rate of discount? Burton Weisbrod in studying the economics of public health uses both 4 and 10 percent to represent what money costs the government, and what it could earn elsewhere.¹⁵ Glick and Miller, in looking at the value of education, compared the differences in total income with the total yield of the cost of education invested in government bonds (at 3 percent).¹⁶ In discussing government bonuses for smaller families in India, Stephen Encke suggests using the rate that the country can earn on invested capital, perhaps 20 percent for India.¹⁷

In discussing investments in future water supply, Hirshleifer and others point out that market interest rates are affected by government policy, hence are not necessarily the ideal rate at which society should discount the future; however, they conclude:

the head's earnings that probably went to them. For some estimates, see Earl Cheit, *Injury and Recovery in the Course of Employment* (New York: John Wiley and Sons, 1961), Chapt. 3.

¹⁵ Burton Weisbrod, *The Economics of Public Health* (Philadelphia: University of Pennsylvania Press, forthcoming).

¹⁶ P. C. Glick and H. P. Miller, "Educational Level and Potential Income," *American Sociological Review*, 21 (June 1956), 307-12.

¹⁷ Stephen Encke, "Government Bonuses for Smaller Families," *Population Review*, 4 (July 1960), 47-50.

"Nevertheless, we can scarcely believe that those responsible for making water-investment decisions can do better than to accept the admittedly imperfect market rates of interest as their guide to relative intemporal values of goods and services."¹⁸ Jacques Thédié and Claude Abraham use, without any particular explanation, 8 percent.¹⁹ Courts in Michigan use 5 percent simple interest to discount future wage losses.²⁰

It is an interesting speculation whether the proper rate for discounting the future should not be the rate of return (earnings/price) on good grade common stocks. When inflation becomes important, this rate can be below that on fixed value assets, because of the important inflation hedge built into stock prices. At least, if inflation is expected, one should consider reducing the discount rate below the dollar rate of return on safe fixed-value investments.

In practice the rate of discount has the greatest effect on the longer term future, and, at any rate above 4 percent, earnings twenty years in the future have little influence on present value. Hence, the influence of uncertainties about working life, or about expected earnings many years in the future, or about the impact of inflation are reduced in importance by the discounting process. Table 9-19 shows the effect of discounting. The difference between forty years and fifty years, i.e., the present value of that ten-year stream of \$1000 per year, is only \$1690 at 4 percent and drops to \$300 at 8 percent. And for a fifty-year working life increasing the discount rate from 4 percent to 8 percent reduces the value of the total stream by more than 40 percent.

¹⁸ Jack Hirshleifer, James DeHaven, and Jerome Milliman, *Water Supply, Economics, Technology, and Policy* (Chicago: University of Chicago Press, 1960), p. 122. E. E. Pyatt and P. P. Rogers in a recent article argue: "Typically in Western cultures, a discount rate of 4 percent is acceptable and appropriate." See "On Estimating Benefit-Cost Ratios for Water Supply Investments," *American Journal of Public Health*, 52 (October 1962) 1729, 1730.

¹⁹ "Economic Aspect of Road Accidents," *Traffic Engineering and Control*, Vol. 2 (February 1961), pp. 589-95.

²⁰ See, for interest on delayed settlements, "Interest on Judgments in Federal Courts," *Yale Law Journal*, 64 (June 1955), 1019-48.

TABLE 9-19

*Present Value of an Annuity of \$1,000 Per Year
for a Term of Years at Various Interest Rates*

Number of years	Interest rate		
	4 percent	6 percent	8 percent
10	\$ 8,110	\$ 7,360	\$ 6,710
20	13,590	11,500	9,820
30	17,290	13,760	11,260
40	19,790	15,050	11,920
50	21,480	15,760	12,230

If one looks at the value of the remainder of a man's working life, based on his discounted earnings less \$2000 per year maintenance costs, the value rises as the nonearning dependent years are passed, and continues to rise as the years of lower earnings are passed and the higher earnings years are approached. At 4 percent the peak value is reached at about age twenty-five. At higher discount rates the peak is reached at a lower total value, and later in life.²¹

(7) The use of an average for estimating future earnings, assuming that lifetime patterns will continue, provides a basis for looking at the future, but any individual may give evidence that he is capable of earning more or less than others of his education level, for instance. In that case, the whole estimate can be adjusted up or down according to the extent to which his recent earnings have been below or above those of his group.

(8) Finally, what about pain and suffering? These are psychic costs which have no economic measure. The loss of a limb may not impair the earnings of a professional person, nor the loss of a child be an economic loss to the parents. Some have suggested putting values on physiological losses similar to veterans' disability ratings. Even this system would not take care of the loss of a child. To omit the costs of pain and suffering because there is no satisfactory way to measure them is unsatisfactory but inevitable.

²¹ Weisbrod, *supra* note 15, at 76.

6. *Procedures Used in This Study*

Turning now to the estimates of the costs of accidents used in this study, the above considerations led directly to the following decisions. For medical care and property damage, the respondent's own estimates of cost were used. This includes an estimate of future medical care. When a long stream of future costs was involved, the costs were discounted to the present at 4 percent. For pain and suffering, no estimates were included.

For loss of ability to do one's work, whether for money or housework, an estimate was made of the present value of that loss, net of costs of subsistence (not needed in the case of fatalities) as follows.

(a) For those who returned to work and who were earning as much as or more than before the accident, the actual wage loss incurred was included without discounting.

(b) For housewives, a value of \$3000 per year was placed on their work—clearly an underestimate. If they were only partially disabled, some fraction of the present value of a \$3000 annual annuity was taken. A life expectancy of seventy-five was used, and it was assumed that a woman's work "is never done." Except for older women, the discounting makes the actual life expectancy used relatively unimportant.

(c) For fatalities, \$2000 a year discounted was deducted from the estimated income loss as a maintenance cost. This is a generous estimate and, combined with the conservative estimate of the value of a housewife's work and child care, provides an extremely conservative estimate of the total economic loss incurred by an individual or a family.

(d) For those in the labor force, the basis for estimating potential future earnings is shown on Table 9-20.

These averages include the effects of unemployment and temporary disability but not of things that remove individuals from the labor force. The averages assume that the age-education patterns of differential earnings will persist, even in the future

TABLE 9-20

*Levels of Wage-Salary Income
on Which Lifetime Income Tables Can Be Based^a
(1956 and 1957 incomes averaged
for nonfarmer heads of spending units)*

Age	<i>Whites by Educational Level</i>					<i>Non-southern nonwhites</i>
	<i>1-8 grades</i>	<i>9-11 grades</i>	<i>12 grades</i>	<i>College, no degree</i>	<i>College degree</i>	
18—24	\$1460	\$1560	\$2800	\$2300	\$5045	\$2555
25—34	3220	4245	4500	5025	6245	3200
35—44	3540	4315	4685	6185	8345	3795
45—54	3725	3885	4990	5190	9420	3040
55—64	2900	3660	4185	4190	6480	1975

^a Source: Surveys of Consumer Finances, 1957 and 1958, Survey Research Center, The University of Michigan, Ann Arbor.

when the proportions of people with college degrees, for instance, will change.²²

Implicitly, then, losses which would have occurred in any case owing to unemployment are not included as losses due to accidents. Table 9-20 treats nonwhites separately because a combination of past history and present prejudice makes their earnings quite different from those of whites. All farmers are excluded from the table assuming that Michigan farmers' incomes would not differ much from those of Michigan nonfarmers at the same education level.

When the streams of income are discounted cumulatively back to the present at 4 percent, the loss through permanent disability of a person of any given age and education can be estimated (see Figure 9-2). For fatalities, \$2000 per year is no longer needed to maintain the individual (\$1000 per year in the first ten years

²² Herman Miller has shown that this appears to be true for the recent past; see "Annual and Lifetime Income in Relation to Education, 1939-1959," *American Economic Review*, 50 (December 1960), 962-86.

In fact, there is evidence that the educational differential in earnings is increasing in spite of the increased number of highly educated people. See J. Morgan and C. Lininger, "Note on Education and Income," *Quarterly Journal of Economics* LXXVIII (May 1964), 346-47.

of life), so the present values of future income are reduced by the present values of future maintenance (Figure 9-3). For women not employed in producing income (that is, housewives), an arbitrary figure of \$3000 was used for the value of services, regardless of the level of education (Figure 9-4).

Finally, in using these charts, the value so derived is adjusted up or down on the basis of the ratio of the individual's actual pre-

FIGURE 9-2
INCOME LOSS OF MEN AND EMPLOYED SINGLE
WOMEN PERMANENTLY DISABLED AT VARIOUS AGES
(dollar amounts discounted at 4% compounded annually)

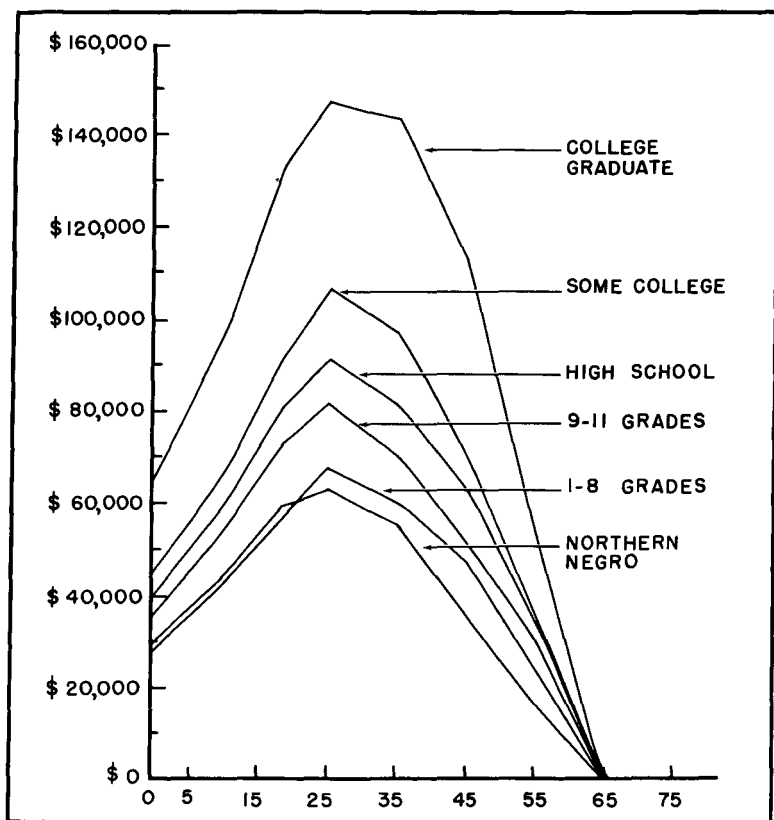
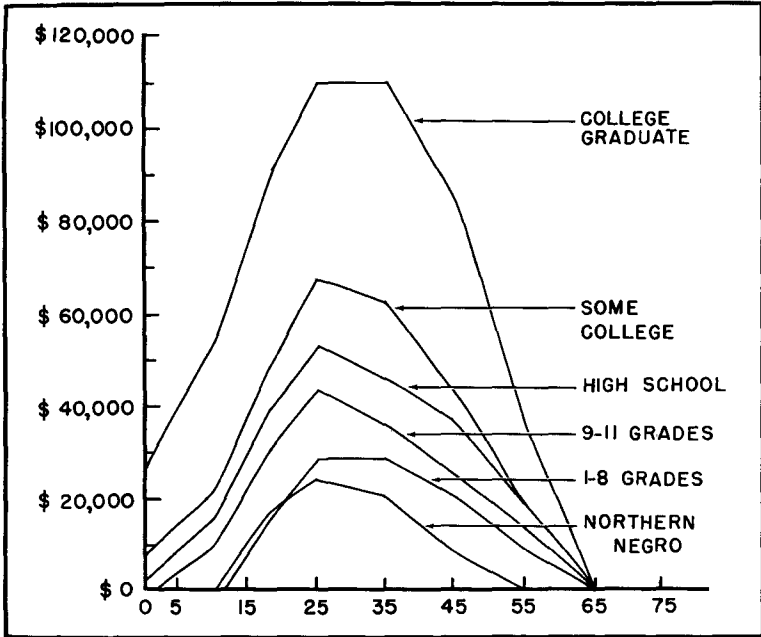


FIGURE 9-3
 INCOME LOSS OF MEN AND EMPLOYED SINGLE
 WOMEN FATALLY INJURED AT VARIOUS AGES
 (dollar amounts discounted at 4% compounded annually)

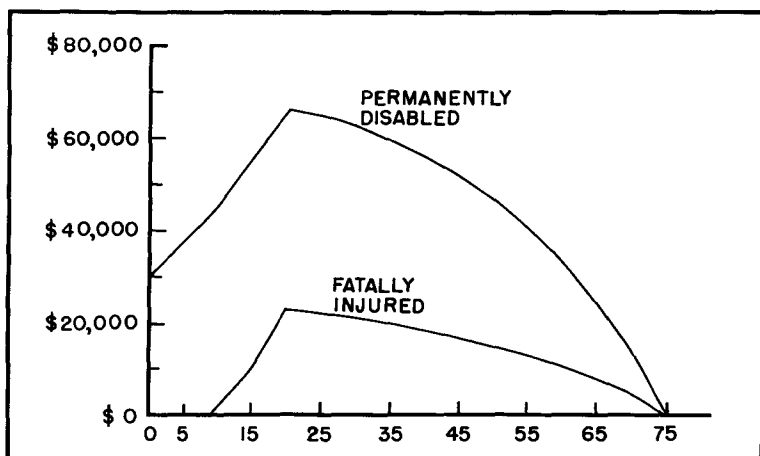


accident income to the average income of those in the same age-education group.

Estimates of income after taxes were available only for total spending unit income, since tax rates depend upon the adjusted gross income of the couple. Hence, it was necessary to use the earnings of spending unit heads before income taxes in evaluating wage losses. Since compensation is not subject to tax, ratios of compensation to loss after tax are slightly understated.

However, the use of current earnings certainly understates future earnings because it ignores the growth in level of real income in the future. The use of national averages instead of data for Michi-

FIGURE 9-4
 INCOME LOSS OF NON-EMPLOYED WOMEN DISABLED
 OR FATALLY INJURED AT VARIOUS AGES
 (dollar amounts discounted at 4% compounded annually)



gan alone also underestimates lost earnings since Michigan is a high-wage state.

The relatively high discount rate, the relatively high maintenance costs assumed no longer to be necessary in case of death, and the low value placed on housewives' services, make all the estimates of the value of lost productivity conservative. The large differences, however, dependent upon the age and abilities of the individual involved, remain in a muted form.

In summary the combined estimates of losses from personal-injury automobile accidents are conceptually as complete as seemed feasible. Conservative estimating procedures were used when there was a choice. The estimates are semiprivate losses, i.e., the loss to the individual or his family, assuming that everyone has some family. Hence, they include the lost earnings, over and above subsistence, of a person killed in an accident and leaving no dependents.

Social costs are higher, particularly if one argues that all

consumption is part of national income, and the loss even of subsistence income is a social loss. They are also higher because they should not be discounted, for reasons discussed above.

M. INTERVIEWING

All personal and telephone interviewing for the Michigan survey was completed by members of the Survey Research Center's professional field staff. Because all the interviewers participating in the various phases of this project were Michigan residents, it was feasible to bring the group together for training sessions at the Survey Research Center prior to the undertaking of each individual field operation. These sessions were designed to supplement the training in basic interviewing techniques that had been received by the interviewers throughout their careers with the Center by acquainting them with the objectives and research design of the study. Every effort was made to familiarize the interviewers with the alternative procedures available for settling disagreements arising from personal-injury automobile accidents, and with the roles played by the parties involved in these procedures. An important part of each training session was the presentation and discussion of a minimum technical vocabulary of insurance and tort law. The objectives of specific questions and question sequences were discussed for each questionnaire, so that interviewers would have a maximum likelihood of securing responses that were both relevant and consistent with the purposes of the study.²³

N. DATA PROCESSING

All completed interviews for the Michigan survey returned by the field staff were processed using standard Survey Research Center procedures. The first step in this process involves editing each questionnaire to check for and reconcile inconsistencies in

²³ The field training manuals used for each part of the Michigan Study are included in Supplement A to this report. (*Supra* note 1.) See also, *Manual for Interviewers* (Ann Arbor: Survey Research Center, 1960).

the recorded responses, assign missing data wherever possible, and complete prescribed financial calculations. For each completed personal-interview questionnaire from the Michigan survey, all financial information was transferred to worksheets—one listing all expenses arising from the accident, and the other listing all compensation received. These worksheets implemented the categorization of data as well as its logical presentation. The use of worksheets to group financial data and to calculate loss incurred and compensation received facilitated the elimination of any duplication or inconsistency that may have been present in the questionnaires. Especially important was a good estimation of income loss, which proved to be a relatively large fraction of the total economic loss for many respondents.

The second major aspect of data processing involved the coding of the data on each edited questionnaire. The information in each questionnaire was summarized by means of numerical codes which were designed to provide mutually exclusive and logically exhaustive categories for presentation of the answers to each question. Uniform treatment of questionnaires was assured by "double-coding" a decreasing fraction of the interviews processed by each coder. The codes were then key punched making the data usable for analysis.

The editing and coding operations for the questionnaires for each part of the Michigan survey were completed by two independent staffs. Each staff was carefully trained to complete the specific responsibilities assigned to it, and in addition, was given an extensive briefing concerning the total research design and the specific objectives of each part of the study.²⁴

²⁴ The editing instructions, worksheets, and codes for each part of the Michigan Study are included in Supplement A to this report. (*Supra* note 1.)

For a detailed description of the coding procedures used, see *Manual for Coders* (Ann Arbor: Institute for Social Research, 1961).

CHAPTER 10

Survey Methods: An Evaluation

INTRODUCTION

Estimates based on sample surveys can differ from the truth. Even well-designed samples use only part of the population as a basis for making estimates about the total, and the distribution of cases drawn into a single sample may differ in one way or another from the population distribution. No two samples would be exactly alike. Such variability from sample to sample is called, confusingly enough, "sampling error." The range of likely sizes of such errors can be estimated for any sample selected using probability techniques.

A second, and more important, deviation from the truth arises if there is bias; that is, if there exists a persistent tendency for a sample to depart from the truth in a systematic way. Insofar as the deviations arise from not interviewing everyone in the sample (nonresponse), bias is limited if the response rate is high. If the deviations arise from systematic response errors (e.g., memory distortion, such as a tendency for all respondents to underreport lengthy hospital stays), they remain a problem.

Turning to the Michigan survey, if the estimates obtained from two sample subgroups differ (for example, if the estimate of the average loss for fatalities is \$1000 less than the estimate of the average loss for seriously injured individuals), it is possible to estimate mathematically the probability that the difference could have arisen as a consequence of chance variation in the sampling, and would not represent a real difference if all the individuals involved in personal-injury accidents had been interviewed. If the probability of the variation resulting from chance is low, the difference is said to be "statistically significant." A significant dif-

ference is one that would be likely to remain if the entire population were interviewed.

The size of the differences that would be likely to occur by chance is reduced as the size of the sample is increased. Consequently, a difference that is not significant in a small sample may prove to be significant if the size of the sample is increased. The sampling errors for the data in this report can be estimated using the tables in Appendix A. Throughout the report, attention is focused on differences that are likely to be statistically significant.

Not all errors should be associated with the sampling process itself. There are two distinct types of nonsampling error, both of which could be present in the Michigan survey. The first type includes all errors that tend to be cancelling or offsetting in nature. By definition, errors which offset one another will have no appreciable effect on estimates made from survey results; they may be considered "random" in much the same sense as sampling error.

The second type of nonsampling error is bias. Bias may arise from a variety of sources throughout the survey process, including an incomplete sample frame, systematic differences between those completing a questionnaire and those not responding, ambiguous or "loaded" questions, inaccurate transcription of data, systematic tendencies on the part of respondents to overstate or understate requested information, the interviewing technique used, and errors in the data-processing procedures, including those resulting from editing and coding decisions. In the Michigan survey, bias also may have arisen from the sample-substitution procedure described in Chapter 9.

The size of systematic errors cannot be estimated mathematically, as can sampling error; however, this chapter attempts to evaluate those areas of the present study where it seems most likely that systematic error would have occurred. The first part of the chapter evaluates potential biases that may have arisen from

the sampling and substitution procedures. The second part of the chapter is devoted to an evaluation of potential bias from discrepancies evident in the reporting of hospital and legal fees by individuals completing the personal interview.

A. EVALUATION OF POTENTIAL SOURCES OF SAMPLE BIAS

1. *The Sampling Frame*

It was pointed out in Chapter 9 that police accident reports offered the best available sample source. However, this is not to say that data from the police personal-injury reports accurately reflect all personal-injury automobile accidents that occur in Michigan. Clearly, personal-injury automobile accidents that were *not reported* either to the Detroit Police or to the Michigan State Police as having involved injury could not have been drawn into the sample. This problem is two-fold. First, some accidents are never reported to any police agency; second, some police agencies do not transmit copies of all their reports to the appropriate State Police Bureau. In Michigan, cities with a population in excess of 20,000 are not required to report all personal-injury accidents to the State Police, although many do.

Bias introduced as a result of nonreporting is difficult to evaluate. However, a few guides are available. The Detroit Police Department estimates a reporting rate of 98 percent for *all* accidents within the city limits, including both those classified as personal-injury and those classified as property-damage only. The Michigan State Police estimate an 80 to 90 percent reporting rate for the state as a whole, with some counties and cities being much lower. It seems probable that in areas of the state with low population densities, where police coverage is necessarily thin, the percent of unreported accidents would be higher than for the rest of the state. Also, it would seem probable that the percent of personal-injury accidents reported—especially accidents of a rela-

tively serious nature—would be considerably higher than the overall reporting rate for all accidents.¹

The Claims Department of the Detroit Automobile Inter-Insurance Exchange kindly consented to keep a record for one month of bodily-injury claims listed on the "Home Office Diary." These were cases that had been assigned to the Department for further attention during the month. Of the 1000 cases studied, 1.7 percent had not been reported to the police and 5.3 percent had been reported to the police as accidents involving no personal injury, i.e., property damage only. It is interesting that "where there was no injury reported (to the police), the injuries claimed were almost entirely neck and back sprains."²

In order to evaluate the degree of underreporting to the State Police by cities with populations in excess of 20,000, a mail questionnaire was sent to the police chief of each of the 13 such cities sampled. The questionnaire asked two questions about the particular city—(1) "How many personal-injury automobile accidents occurred during 1958?" and (2) "How many fatal automobile accidents occurred during 1958?" All 13 questionnaires were returned promptly. By applying the sampling interval that had been used to sample State Police records to the accident totals furnished by the 13 cities, a number was obtained which represented the number of reports that could be expected to be found in the actual sample if a copy of every report had been sent to the State Police. This "expected sample size" was then compared with the actual number of records sampled from the State Police. Table 10-1 shows this comparison.

If all the cities listed in Table 10-1 had submitted a personal-

¹ These general conclusions are corroborated by a massive study conducted in Illinois by the Department of Public Works and Buildings, and published in 1962 under the title, *Cost of Motor Vehicle Accidents to Illinois Motorists, 1958*. However, the methodologies of the two studies are different in many important respects; hence, a specific comparison of the seriousness of bias introduced by unreported accidents will not be attempted here.

² Robert G. Jamieson, then General Manager, Detroit Inter-Insurance Exchange (Personal Correspondence, February 2, 1960).

TABLE 10-1

Estimate of Bias Resulting from Nonreporting of Personal-Injury Automobile Accidents to the Michigan State Police by Cities with Populations in Excess of 20,000

<i>City</i>	<i>Actual number of accident reports sampled from State Police files</i>	<i>Expected number of accident reports (based on mail questionnaires from police chiefs)</i>	<i>Under-reporting bias</i>
Bay City	15	19	4
Dearborn	32	34	2
Highland Park	10	14	4
Muskegon	2	10	8
Port Huron	0	6	6
Other eight cities with populations in excess of 20,000	110	110	0
Total	169	193	24

NOTE: The total sample included 1118 accident reports.

injury report to the State Police for each accident they reported on the mail questionnaires, the columns showing actual sample size and expected sample size would be identical. For example, noting the figures for Bay City and assuming the figures reported by the police chief are correct, if the sample had been selected from files at the Bay City Police Headquarters by applying the same sample interval used for the Bay City file at the State Police Bureau, a sample of nineteen accident reports would have been obtained. However, the actual sample obtained from the State Police included only fifteen accident reports. Thus, it appears that the complete Bay City personal-injury file for 1958 contains about 168 (sampling interval x estimated bias: 42×4) more reports than its counterpart at the State Police Bureau, with the consequences that the actual Bay City sample is shy four reports. As previously mentioned, this conclusion is predicated on the assumption that the figure reported by the Bay City police chief is the correct one. This assumption seems reasonable in view of the fact that Bay City

and the other cities shown in Table 10-1 are not required to submit copies of all personal-injury accident reports to the State Police.

Criteria used by police officials to determine which reports should be forwarded are not known. It is entirely possible that reports not forwarded are atypical in a number of important dimensions. However, even if this is true, the number of reports not forwarded is so small relative to the total number of reports that are forwarded to the State Police Bureau that the potential bias did not seem large enough to require additional attention.

A second potential source of bias in the sampling frame is the *omission of injured persons* from police accident reports. As with unreported accidents, omissions could affect the present sample in two ways. First, if no one had been listed as injured at the time of the accident, the police report would have been filed as a "property damage" accident, and, consequently, the report would have had no chance of being included in the personal-injury sample. The Detroit Automobile Inter-Insurance Exchange data shown above indicate that in 53 out of the 1000 claims examined, the Exchange's records listed at least one person as having been injured while the police accident reports for these same accidents listed only property damage. To the extent that this ratio can be applied to the entire state, distributions of *absolute numbers* estimated from the Michigan survey understate the true values; however, if it is assumed that in personal-injury accidents incorrectly classified as property-damage accidents minor injuries tend to predominate, then bias introduced from this source into the aggregate *dollar* estimates would cause the estimates to be slightly lower than the true values, but the aggregate error would not be large. On the other hand, *average values* per injured person would be biased slightly upward.

Persons injured in an accident reported by the police as a "personal-injury" accident, but who are not listed as injured on the report, provide another potential source of "omissions" bias. Such persons would include those leaving the scene of an accident be-

fore the police arrive (and whose names are not given or not known by those remaining at the scene), and those who did not realize that they had been injured or did not realize the seriousness of their injury until after the police accident report had been completed. Results of the Michigan survey show that 14 percent of the individuals listed as noninjured drivers on the sampled police reports stated that they had been treated by a doctor as a result of the accident. Here again, it would seem that underreporting would be less likely for individuals sustaining relatively serious personal injuries. In any case, for accidents involving serious personal injuries, where personal interviews were used, information concerning injured individuals not listed on the police reports was usually recorded on a questionnaire, and hence included in the analysis.

In summary, the effects of not having a perfect sampling frame are likely to be small, and mainly result in a tendency toward omission from the estimates of relatively minor injuries and those occurring in rural areas. A slight bias is also introduced because five of the larger cities in Michigan did not report all their personal-injury accidents to the State Police.

2. *Nonrespondents*

In the Michigan survey, the 2137 respondents who completed a mail or telephone screening questionnaire were "weighted" to represent the 2872 individuals in the original sample. (For a description of the weighting procedure, see Chapter 9.) It was pointed out in the introduction to this chapter that any systematic differences between the characteristics of those completing a questionnaire and those not responding could introduce a bias into the results. Conversely, if the characteristics of nonrespondents are similar to those of respondents, the weighting procedure will *not* bias the survey estimates. In most sample surveys no data are available for comparing nonrespondents with respondents. However, in the Michigan survey the sample was selected from police reports, and, consequently, data that are recorded on the reports

can be used to make comparisons. Tables 10-2 through 10-8 show these comparisons.³

Table 10-2 indicates that whether or not a sampled individual returned the questionnaire does not seem to be related to the individual's role in the accident. Similarly, Table 10-3 suggests that being arrested or cited for a traffic violation has little bearing on whether or not a designated respondent will complete a questionnaire. Individuals who were either arrested or cited for a violation and those neither arrested nor cited for a violation are represented about equally in the response and nonresponse groups.

TABLE 10-2
*Role of Person in Accident
distributed by whether a questionnaire was completed*

<i>Role in accident</i>	<i>Total sample (data from police records)</i>	<i>Questionnaire completed</i>	<i>Questionnaire not completed</i>
Driver of automobile	56%	57%	53%
Passenger in automobile	27	26	28
Pedestrian	7	7	7
All others in or on a vehicle (truck, bicycle, motor- cycle, etc.)	7	7	9
Owner of a vehicle but none of the above (usually owner of a parked car)	3	3	3
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>
Number of cases	2872	2137	735

³ In the case of fatalities, the data in Tables 10-2 through 10-8 are for the deceased, not for the respondent. Even though the respondent made the decision to return or not to return the questionnaire, any bias introduced by failure to complete the schedule would be in terms of the deceased's characteristics, not the respondent's. In the interest of clarity, fatalities and nonfatalities are not separated in the tables.

TABLE 10-3

Whether Respondent Arrested or Cited for a Traffic Violation distributed by whether a questionnaire was completed

<i>Whether arrested or cited for a traffic violation</i>	<i>Total sample (data from police records)</i>	<i>Questionnaire completed</i>	<i>Questionnaire not completed</i>
Arrested	16%	16%	18%
Not arrested: but cited for a violation	12	12	12
Not arrested and not cited for a violation	72	72	70
Total	100%	100%	100%
Number of cases	2872	2137	735

Turning to the extent of the injuries incurred, Table 10-4 shows that substantially no bias is introduced by the nonrespondents here.

When one examines the demographic characteristics of injured persons, it becomes apparent that women were slightly more inclined to complete a mail or telephone questionnaire than were males (Table 10-5); however, the difference is relatively small. Table 10-6 indicates that the age of an individual has little bearing on whether or not a questionnaire was returned.

TABLE 10-4

Extent of Injury distributed by whether a questionnaire was completed

<i>Extent of injury</i>	<i>Total sample (data from police records)</i>	<i>Questionnaire completed</i>	<i>Questionnaire not completed</i>
Fatal	8%	9%	6%
Serious	8	7	9
Possibly serious	17	16	19
Minor	26	26	25
None	39	40	39
Not ascertained	2	2	2
Total	100%	100%	100%
Number of cases	2872	2137	735

TABLE 10-5

*Sex of Injured Person
distributed by whether a questionnaire was completed*

<i>Sex of injured person</i>	<i>Total sample (data from police records)</i>	<i>Questionnaire completed</i>	<i>Questionnaire not completed</i>
Male	68%	67%	72%
Female	31	32	25
Not ascertained	1	1	3
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>
Number of cases	2872	2137	735

TABLE 10-6

*Age of Injured Person
distributed by whether a questionnaire was completed*

<i>Age of injured person</i>	<i>Total sample (data from police records)</i>	<i>Questionnaire completed</i>	<i>Questionnaire not completed</i>
0—17	18%	18%	17%
18—34	37	36	41
35—44	17	17	15
45—54	10	11	10
55—64	8	8	6
65 or older	5	6	4
Not ascertained	5	4	7
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>
Number of cases	2872	2137	735

The only significant suggestions of bias are found in Tables 10-7 and 10-8. Table 10-7 indicates that the weighted estimates from the total sample are biased slightly in the direction of white respondents, since whites represent a larger percentage of the group responding than they do of the total sample; conversely, nonwhites are somewhat underrepresented in the response group. In terms of occupation, individuals classified as professionals

and those in the retired-disabled-housewife-student category are slightly overrepresented in the response group (Table 10-8), and laborers are somewhat underrepresented. To quantify these biases somewhat differently than shown in the tables, of the whites in the sample 76 percent completed a questionnaire and 24 percent did not, while of the nonwhites 56 percent completed a questionnaire and 44 percent did not. As compared with the overall response rate of 74 percent, questionnaires were returned by 89 percent of the professionals and 77 percent of the retired-disabled-housewife-student category, but by only 66 percent of the laborers.

TABLE 10-7
*Race of Injured Person
 distributed by whether a questionnaire was completed*

<i>Race of injured person</i>	<i>Total sample (data from police records)</i>	<i>Questionnaire completed</i>	<i>Questionnaire not completed</i>
White	84%	87%	77%
Nonwhite	10	7	16
Not ascertained	6	6	7
Total	100%	100%	100%
Number of cases	2872	2137	735

Looking at the seven tables together, the research staff concluded that no significant bias is present, and therefore no special weighting procedures were needed to correct the estimates. The small bias that does appear to be present is evident in the underrepresentation of nonwhite laborers. Although level of education is not recorded on the police report, it would not be inappropriate to conclude that the response group is also biased somewhat in the direction of more highly educated persons, since education and occupation are correlated. This small bias is readily explained when one considers the fact that most of the nonresponse in this sample resulted from an inability to locate respondents. The re-

TABLE 10-8

*Occupation of Injured Person
distributed by whether a questionnaire was completed*

<i>Occupation of injured person</i>	<i>Total sample (data from police records)</i>	<i>Questionnaire completed</i>	<i>Questionnaire not completed</i>
Professional	4%	5%	2%
Self-employed	4	4	3
Clerical and sales workers	6	6	5
Craftsmen and foremen	16	16	16
Laborers	7	6	9
Service workers	3	3	3
Farmers	1	1	1
Members of the armed forces	1	1	3
Retired; disabled; housewife; student	29	30	25
Not ascertained	29	28	33
Total	100%	100%	100%
Number of cases	2872	2137	735

fusal rate was very small among those respondents actually contacted. Therefore, it would be expected that any bias would be in the direction of the relatively mobile portion of the population, who are difficult to locate; and the unskilled nonwhite in Michigan is a relatively mobile individual.

3. Sample Substitution Procedure

As indicated in Figure 9-1, the 105 plaintiffs from the police sample are dropped for analysis purposes and the individuals from the court sample are substituted for them. The reader needs to understand both the logic underlying this type of sample substitution and the comparability of the two groups in this particular study.

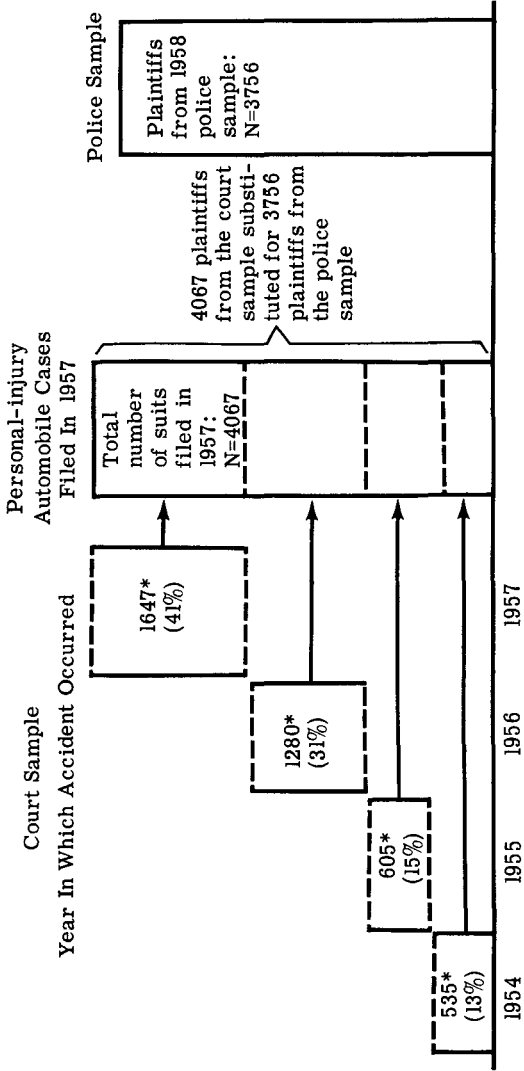
The logic underlying the substitution procedure used in the Michigan survey can be illustrated in a simpler context by consider-

ing an analogous sampling problem, that of studying the attitudes of hospital patients toward treatment received. The length of time between admission to a hospital and discharge may vary from a few hours to a number of years, with the majority of patients staying for a relatively short period of time. A representative sample of all hospital visits would include a proportionate number of stays of various durations. Such a sample could be selected in at least two ways—(1) by sampling admissions and following the patients through to discharge, or (2) by sampling discharges and asking patients about treatment received during their stay. If admissions were sampled, a questionnaire would be completed with each patient just prior to discharge. Since the analysis could not be undertaken until all the patients sampled had completed their stays, it would take a number of years to complete the interviewing phase of the research. Sampling discharges, however, would permit the interviewing to be completed in a relatively short period of time.

To the extent that variables having a strong influence on the attitudes being studied remain relatively stable through time, results would be similar using either procedure. If these conditions are present, the samples would be interchangeable, and clearly the second procedure would be used.

The problem of selecting a sample for the Michigan survey is similar to that described in the previous paragraph, except that no single set of records was available that would denote completion of all personal-injury accident claims, such as the notation of discharge of a patient from a hospital. Hence, the sample had to be selected from records indicating the initiation of an accident or the initiation of a suit. Both sample sources were used, and since most of the cases requiring a relatively long period of time from accident to settlement involved some form of court action, the sample selected from court records was substituted for individuals in the police sample who filed a suit. This allowed the use of somewhat more recent accidents in sampling police records, as

SUBSTITUTION PROCEDURE: MICHIGAN AUTOMOBILE ACCIDENT STUDY



*Number of accidents during the specified year that resulted in personal-injury automobile suits being filed in 1957

FIGURE 10-1

well as making it possible to oversample cases that resulted in a suit (usually more serious).

Figure 10-1 diagrams the two components involved in the substitution procedure. The left-hand side of the figure presents the court sample in two ways—(1) an estimate of the total number of personal-injury automobile suits filed in 1957, and (2) the estimated total distributed by the year in which the accident occurred. The figure shows that of the estimated 4067 plaintiffs filing personal-injury automobile accident suits in 1957, 1647 (41 percent) were involved in accidents that took place in 1957; 31 percent of the 1957 plaintiffs were suing as a result of 1956 accidents, 15 percent as a result of 1955 accidents, and 13 percent as a result of 1954 accidents. For the analysis of Michigan personal-injury automobile accidents, these 4067 plaintiffs have been substituted for the estimated 3756 plaintiffs in the 1958 police sample.

As in the hospital example, for a substitution such as the one made in the Michigan survey to be valid, variables having a strong influence on the two components of the substitution must be relatively stable. As a matter of fact, if such variables lack stability, the study cannot have much meaning. In situations changing very rapidly, a survey provides at best only a snapshot of a moving target, and the results of such a survey would be of little use for long-run planning or forecasting. To repeat then, the validity of the substitution made in the Michigan survey was based on the assumption that plaintiffs in personal-injury automobile suits filed in 1957 are comparable to plaintiffs or potential plaintiffs from 1958 personal-injury accidents in all respects that are critical to the research results presented. What evidence is there of similarity between the two groups?

First, looking at the aggregate estimate of plaintiffs obtained from each sample, the court sample resulted in an estimate that personal-injury automobile accidents resulted in 4067 plaintiffs filing suits in 1957. A comparable estimate from the police sample

indicates that 3756 persons who were involved in 1958 personal-injury auto accidents either have or will file as plaintiffs as a result of the accidents. Thus, aggregate annual state estimates using the two sets of data vary by 311 suits, or about 7.5 percent.

The most likely explanation for the discrepancy is undoubtedly to be found in the procedures used to designate plaintiffs from the police sample. These procedures are conservative by design; consequently, the 3756 estimate is probably low.

On the other hand, it is also probable that the 4067 estimate of plaintiffs is higher than it would have been had the court sample been drawn from suits filed in 1958. Table 10-9 shows that fewer deaths, injuries, and accidents occurred during 1958 than during any of the other years shown, and that the 1955-58 trend in all categories is decidedly downward. Assuming some correlation between the number of accidents and the number of suits resulting therefrom, the 1957 court sample would be expected to give a higher estimate of plaintiffs than would the 1958 police sample.

In any case, the substitution appears to be reasonable. The error is not large, and it is in the desired direction (since 1958 appears to have been an atypically "safe" year, perhaps because the reces-

TABLE 10-9

*Selected Motor Vehicle Accident Data for Michigan, 1955-1961**

<i>Year</i>	<i>Deaths</i>	<i>Injuries</i>	<i>Total accidents (including property damage)</i>
1955	2,016	62,234	196,812
1956	1,746	61,158	197,995
1957	1,548	60,067	191,915
1958	1,382	57,767	177,934
1959	1,467	64,873	198,771
1960	1,604	91,026	209,724
1961	1,563	93,950	199,973

* Source: Traffic Accident Facts for Michigan, 1961 (Michigan State Police, 1962), p. 34.

sion resulted in fewer miles driven). The weights for each case in the court sample could have been adjusted downward by about 7 percent, but such an adjustment seemed neither necessary nor desirable.

TABLE 10-10

Sex of Injured Person, Police and Court Samples

<i>Sex of injured person</i>	<i>Plaintiffs from police sample (data from police records)</i>	<i>Plaintiffs from court sample Data from court records</i>	<i>Data from completed interviews</i>
Male	59%	53%	47%
Female	41	47	53
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>
Percent of sample for which sex was not ascertained	0	9	0
Number of cases	128	207	126

TABLE 10-11

Age of Injured Person at Time of Accident, Police and Court Samples

<i>Age of injured person at time of accident</i>	<i>Plaintiffs from police sample (data from police records)</i>	<i>Plaintiffs from court sample Data from court records</i>	<i>Data from completed interviews</i>
0—17	20%	15%	15%
18—34	32	39	31
35—44	25	21	18
45—54	5	14	22
55—64	13	7	8
65 or older	5	4	6
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>
Median age	34	33	37
Percent of sample for which age was not ascertained	3	44	0
Number of cases	128	207	126

A second comparison of the two samples can be made by examining data available from police and court records. The first two columns of Tables 10-10 through 10-13 show the comparative distributions for sex, age, race, and extent of injury for the two samples. The third column of each table shows the distribution of these characteristics for *respondents* from the court sample. The

TABLE 10-12

Race of Injured Person, Police and Court Samples

<i>Race of injured person</i>	<i>Plaintiffs from police sample (data from police records)</i>	<i>Plaintiffs from court sample (Data from court records)</i>	<i>Data from court sample (Data from completed interviews)</i>
White	95%	93%	96%
Nonwhite	5	7	4
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>
Percent of sample for which race was not ascertained	0	45	0
Number of cases	128	207	126

TABLE 10-13

Extent of Injury, Police and Court Samples

<i>Extent of injury</i>	<i>Plaintiffs from police sample (data from police records)</i>	<i>Plaintiffs from court sample (Data from court records)</i>	<i>Data from court sample (Data from completed interviews)</i>
Fatal	8%	7%	7%
Serious; possibly serious	50	67	77
Not serious; none	42	26	16
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>
Percent of sample for which extent of injury was not ascertained	0	12	0
Number of cases	128	207	126

reliability of the comparisons shown in Tables 10-11 and 10-12 is questionable in view of the high percentage of the court sample for whom the information could not be ascertained.

The distributions of demographic data shown in Tables 10-10, 10-11, and 10-12 are quite similar for the two samples, although the court sample has a slightly higher proportion of males and fewer individuals in the older age groups. If there was assurance that the categorizations on which Table 10-13 is based were correct, this table would indicate that there is a serious upward bias in the proportion of "serious" or "possibly serious" cases used in the analysis. This bias would tend to inflate the aggregate values associated with serious injuries. However, since the concern here is with injuries that resulted in a suit, it is entirely possible that the description of the injuries in the court records compared with the descriptions provided by the police accident reports would account for the difference in classification, and, further, that respondents' descriptions of the injuries at the time of the personal interviews, often graphic and perhaps exaggerated, would result in a further shifting from the "not serious" classification to the "serious, possibly serious" group.

For the Michigan survey, the practical aspects of survey administration are well served by the substitution. If all cases from the 1958 police sample were followed to settlement, the data-collection process would not be completed until 1964 or 1965, and perhaps later if a number of the cases went to appeal.

The foregoing evaluation of the substitution is necessarily brief; it would be possible to complete a more definitive evaluation when the court cases from the 1958 police sample are finally settled. If such an evaluation were made, the effect of variables assumed relatively stable for the present analysis—such as the cost of automobiles and automobile repairs, the cost of medical care, the legal procedures used to handle personal-injury cases (for example, the judge's instructions to the jury and the percent of jury versus nonjury trials), the legal, moral, and cultural restrictions govern-

ing the behavior of opposing lawyers and insurance adjustors in the bargaining process, and the distribution of awards or verdicts—could be closely examined and compared for the two samples. Although a follow-up study of plaintiffs from the 1958 police sample would be required, such an evaluation would provide useful methodological evidence for those contemplating future research similar to the Michigan survey.

B. ACCURACY OF PERSONAL INTERVIEW RESPONDENTS' REPORTING OF HOSPITAL EXPENSES AND LEGAL FEES

1. *Hospital Expenses: Respondent-Hospital Discrepancy*

One important aspect of the Michigan survey is the quantification of both the economic losses sustained in personal-injury automobile accidents and the sources from which these losses were compensated. Personal-interview respondents were questioned about the economic loss sustained by themselves and by other members of their family involved in the accident. Because in accidents involving more than one family member a separate questionnaire was completed for each member of the family, and because of the length of time that had elapsed between the accidents and the interviews, the research staff decided that it would be highly desirable to make some effort to check the accuracy of respondents' reports. Two checks were made: one to ascertain the accuracy of reporting of hospital expenses and the means by which they were paid, and the other to ascertain the accuracy of reporting of legal expenses. The research budget required that both these checks be limited to data reported by personal-interview respondents; however, it will be recognized that these are the accidents in which large losses were sustained, and, therefore, the accidents in which reporting errors could lead to serious distortions in aggregate survey estimates. Results of the two checks are summarized below.

Data for the assessment of the validity of reported hospital expenses were obtained by sending mail questionnaires to all hos-

pitals, clinics, or other medical institutions named by personal-interview respondents as having treated the injured or deceased individuals. Hospitals were asked to complete a separate one-page questionnaire for each discharge subsequent to the date of the accident. The questionnaire asked the total hospital bill for each visit, how much of the bill had been paid, and who paid it. Questionnaires asking about 301 individuals were sent to 136 Michigan hospitals, clinics, or other medical institutions. One follow-up letter was used. Eighty-six hospitals returned a total of 318 questionnaires, which provided data about 235 persons. Ninety-three of these questionnaires were concerned with outpatient visits only and were not used in the validity checks. The research staff felt that the small amounts involved were not significant, and that, more importantly, their inclusion in the analysis would result in an overall statement of validity that might tend to conceal any systematic errors present in the reporting of larger hospital bills.

The hospital validity check was endorsed by the Board of Trustees of the Michigan Hospital Association. A letter from the Executive Director of the Association was included in the initial mailing, and there can be little doubt that the letter substantially increased the overall response rate for this part of the study.

Each questionnaire returned by a hospital contained data about one visit for one individual. The completed hospital questionnaires were matched with their corresponding personal-interview questionnaires by comparing dates of admission and discharge, duration of stay, the total hospital bill, and the sources of payment as reported by both the hospital and the patient. The actual validity check was completed using only those questionnaires for which the research staff was reasonably confident that the hospital and the patient had provided data about the same visit. Data about hospital visits not directly associated with the sampled automobile accidents were set aside. One hundred seventy-three matched questionnaires were used for the final analysis.

The overall conclusion to be drawn from the hospital validity check is that there is a tendency for respondents to *overreport* the amounts of large hospital bills by about 30 percent. Assuming that the figure reported by the hospital is correct, Table 10-14 shows that for hospital bills averaging \$608, the average (mean) overreporting is about \$173. In 64 percent of the cases, the patient overreported the total cost of the visit, while in only 26 percent of the cases was the cost of the visit underreported. Although only 8 percent of the respondents reported the hospital bill within \$1 of the actual amount, 56 percent reported the bill within \$100 of the actual amount, and 71 percent reported the bill within \$200 of the actual amount. Thus, the average overreporting of \$173 is caused primarily by the 28 cases (15 percent) where the amount of overreporting is in excess of \$300. There are only 7 cases where underreporting exceeds \$300.

TABLE 10-14

Discrepancy between Respondent's and Hospital's Reporting of Hospital Expenses

<i>Respondent's reporting discrepancy</i>	<i>Number of visits</i>
<i>Overreporting</i>	114
\$500 or more	16
\$300—499	12
\$100—299	34
\$1—99	52
<i>No discrepancy</i>	13
<i>Underreporting</i>	43
\$1—99	30
\$100—299	6
\$300—499	3
\$500 or more	4
<i>Not ascertained</i>	3
Total number of visits	173
Average hospital bill	\$608
Average dollar discrepancy	+\$173

The small number of cases included in the validity check makes it extremely risky to attempt quantitative inferences about errors in the estimated aggregate medical expense (\$25,110,000) shown in Chapter 4. However, it seems clear that for individuals incurring high medical expense, reporting errors are in the direction of overreporting of the actual expenses, and since these cases have a relatively large influence on the estimates of both aggregate medical expense and average medical expense, it can be safely concluded that the *actual* medical expenses incurred are no larger, and may well be slightly smaller, than those reported in the Michigan survey. If one insists on quantification, the best guess that can be made from the present data is that the Michigan survey overstates the aggregate hospital expense by approximately \$1,000,000—which represents about 4 percent of the total medical expense and 0.6 percent of the total economic loss.

Although a detailed analysis of reporting discrepancies will not be presented here, Tables 10-15 and 10-16 provide some additional insight into the overreporting evident in Table 10-14. Table 10-15 shows reporting discrepancy in relation to the size of the hospital bill. It is clear that in terms of absolute size, the average reporting discrepancy increases as the average size of the hospital bill increases. The average reporting discrepancy for hospital bills under \$100 is +\$62. For hospital bills of \$1000 or more the average reporting discrepancy increases to +\$599. The percentage discrepancy decreases, however, as the amount of the bill increases. The average percentage discrepancy for hospital bills under \$100 is 151 percent, while the average percentage discrepancy is only 36 percent for hospital bills of \$1000 or more. Thus, in terms of relative reporting accuracy, the larger bills are reported with considerably more accuracy than are the smaller ones.

Another factor which might be expected to influence the accuracy of reporting of medical expense is the length of time between the accident and the interview. Table 10-16 indicates that such a relationship does exist. For the 38 visits for which the time

TABLE 10-15
Respondent's Reporting Discrepancy Distributed by Amount of Hospital Bill

Respondent's reporting discrepancy	Number of visits	Hospital bill as reported by hospital				
		\$1-99	\$100-499	\$500-999	\$1000 or more	
<i>Overreporting</i>	114	32	52	15	15	15
\$500 or more	16	1	4	5	6	6
\$300-499	12	2	7	1	2	2
\$100-299	34	6	24	1	3	3
\$1-99	52	23	17	8	4	4
<i>No discrepancy</i>	13	5	5	2	1	1
<i>Underreporting</i>	43	14	14	5	10	10
\$1-99	30	14	10	2	4	4
\$100-299	6	0	3	2	1	1
\$300-499	3	0	1	1	1	1
\$500 or more	4	0	0	0	4	4
<i>Not ascertained</i>	3	0	1	2	0	0
Total number of visits	173	51	72	24	26	
Average dollar discrepancy	+\$173	+\$62	+\$129	+\$276	+\$599	
Average percentage discrepancy	+80%	+151%	+57%	+46%	+36%	
Percent of sample	100%	29%	42%	14%	15%	

elapsed between the accident and the interview was less than two years, there is an average *underreporting* of \$23 per visit. When the elapsed time between the accident and the interview is two years or more, the average reporting error is positive and tends to increase as the elapsed time increases.

The trend evident in Table 10-16 may be explained in a number of ways. It is possible that as the elapsed time from the accident to the interview increases, a respondent becomes less able to separate in his own mind the expenses incurred by individual members of his family. Since accidents and not individuals were sampled for the Michigan survey, interviews were often completed with more than one member of the same family. It is entirely possible that while the division of medical expenses among members of a family was inaccurate, with some members underreporting their total expense and others overreporting, the aggregate expense for all members of the family was accurately reported. In many instances, members of the same family were billed jointly for medical services, and the allocation among individuals was based on memory. Overreporting would also result if a respondent reported as hospital expense medical expenses which are often billed separately, such as for X rays, medicines, and some doctor bills. Here again, the reporting of total medical expense may be accurate, even though the respondent's allocation between hospital and nonhospital expenses is not.

A further explanation for the trend in reporting errors may be found in the psychological effect of extended litigation on the respondent. As the elapsed time between the accident and the interview increases, the proportion of cases involving litigation increases (cases in the last two columns of Table 10-16 are all from the court sample), and as the elapsed time increases, so does the average total time required to settle the case. It is likely that a strong relationship exists between the length and complexity of the litigation procedures and memory distortion, although no attempt was made to quantify the relationship in this research.

TABLE 10-16
 Respondent's Reporting Discrepancy Distributed by Length of Time
 Between Accident and Interview

Respondent's reporting discrepancy	Number of visits	Length of time between accident and interview			
		1 year but less than 2 years	2 years but less than 3 years	3 years but less than 4 years	4 years or more
Overreporting	114	29	47	21	17
\$500 or more	16	4	8	2	2
\$300—499	12	3	4	3	2
\$100—299	34	9	14	5	6
\$1—99	52	13	21	11	7
No discrepancy	13	1	7	5	0
Underreporting	43	8	20	12	3
\$1—99	30	6	11	10	3
\$100—299	6	1	4	1	0
\$300—499	3	0	3	0	0
\$500 or more	4	1	2	1	0
Not ascertained	3	0	2	0	1
Total number of visits	173	38	76	38	21
Average dollar discrepancy	+\$173	-\$23	+\$157	+\$107	+\$732
Percent of sample	100%	22%	44%	22%	12%

The 173 matched cases used for the hospital validity check included 11 cases (6 percent) with a reporting discrepancy in excess of \$1000. The average reporting discrepancy for these 11 cases was +\$1773, and the group includes one reporting discrepancy of -\$7000 and another of +\$12,000. Nine of these cases involved overreporting discrepancies and two underreporting. Since these 11 cases have a very large influence on the results reported above, the authors felt that it would be worthwhile to examine them more closely.

The largest error (+\$12,000) appears to have resulted from either an error in transcription or a failure to understand the respondent on the part of the interviewer. The hospital bill is recorded on the personal-interview questionnaire as \$14,000. All indications are that this figure should have been recorded as \$1400.

The second largest reporting discrepancy (-\$7000) resulted because the personal-interview respondent reported as the total hospital bill only that part of the bill which he paid himself; \$7000 paid by an insurance company was omitted.

The 9 remaining large reporting discrepancies were caused, in general, by the respondents' inability to remember accurately the amounts. In a number of these cases, the respondent merely guessed at the figure and in other cases records were used which were apparently incomplete. In two cases, the respondent reported total compensation received from hospital and medical insurance, not the hospital bill per se. Apparently, these respondents had medical coverage which resulted in payments to them of more than double the actual amount of the hospital bill. Thus, with respect to the particular questions being examined here, the large reporting discrepancies appear to have resulted from either memory or communication problems.

2. Hospital and Legal Expenses: Respondent-Lawyer Discrepancy

Before turning to a comparison of the reporting of claimants and their lawyers, it should be pointed out that these data do not constitute a validity check in the same sense as the hospital data

just discussed. In the hospital check, one can be reasonably confident that amounts provided by the hospitals are correct. When comparing dollar amounts reported by a lawyer and his client, however, the possibility of error is present in either report, although it would be expected that the lawyer's reporting of fees is, in general, more accurate.⁴ The tables below show the consistency of reporting between lawyers and their clients, but they do not necessarily indicate the validity of the reporting of either source.

The general conclusions to be drawn from the consistency check are, first, that claimants who complete personal interviews tend to report larger medical expenses than do their lawyers and, second, that these same claimants also tend to report higher legal fees than do their lawyers, but that the discrepancy in reported legal fees is much less than for reported medical expense. In terms of total medical expense, it is likely that the lawyers' reports are closer to the correct figures than are those of their clients, since the clients, as a whole, overreported large hospital bills (a major component of total medical expense).

Table 10-17 shows the distribution of total medical expense as reported by the lawyers and by their clients, as well as the average (mean) expense for the two distributions. It is evident that the average medical expense reported by claimants' lawyers is only

⁴ For purposes of this discussion, the analysis of discrepancies in the reporting of hospital expenses is treated as a validity check because only data from carefully matched hospital and personal-interview questionnaires were used (*supra* p. 402), and all the hospital information was transcribed from accounting records. On the other hand, the comparison of discrepancies in the reporting of legal fees is treated as a consistency check because many lawyers could not report their clients' expenses, and others estimated amounts from memory with the aid of incomplete records.

For example, 4 percent of the lawyers could not report the amount of the legal fee they charged their clients, and 27 percent of the lawyers neither knew nor could estimate their clients' medical expenses. About 75 percent of the claimants' lawyers referred to a case file during the interview; however, there was a tendency for relatively complete records to be limited to cases that had approached or reached a trial or a pretrial conference. Thus, while there is reasonable certainty that the hospital accounting data is correct for matched cases, in only a comparatively few instances were the expense data reported by lawyers transcribed directly from records that could be assumed accurate with some confidence.

TABLE 10-17

*Total Medical Expense as Reported by Claimants and Claimants' Lawyers
(percentage distribution of claimants and claimants' lawyers who
reported medical expense)*

<i>Total medical expense</i>	<i>Total medical expense as reported by:</i>	
	<i>Claimants</i>	<i>Claimants' lawyers</i>
No medical expense	12%	14%
\$1—499	34	48
\$500—999	18	19
\$1000—2999	28	13
\$3000—4999	3	5
\$5000—9999	5	0
\$10,000 or more	0	1
Total	100%	100%
Average medical expense	\$1113	\$763
Number of cases	101	101

about two-thirds of the average medical expense reported by claimants.

When asked about total legal expense, claimants again tended to report figures that were higher than those reported by their lawyers, but, as stated above, there was much greater agreement between the two reports than was evident in the reporting of medical expense. Table 10-18 shows that, on the average, claimants reported legal expenses which were about 8 percent larger than those reported by their lawyers. Although it is not shown in the table, the average absolute reporting discrepancy by claimants was +\$370, or about 22 percent of the average legal expense of \$1647 reported by lawyers. Seventy-five percent of the claimants had reporting discrepancies of less than \pm \$400, and 66 percent of the claimants had reporting discrepancies of less than \pm \$200.

In terms of future research, the important conclusions to be drawn from the consistency data are that the claimant or his lawyer appear to be equally reliable sources for obtaining the information necessary to estimate aggregate legal expense and

TABLE 10-18

*Legal Expense as Reported by Claimants and Claimants' Lawyers
(percentage distribution of claimants and claimants' lawyers who
reported legal expense)*

<i>Legal expense</i>	<i>Legal expense as reported by:</i>	
	<i>Claimants</i>	<i>Claimants' lawyers</i>
No legal expense	8%	3%
\$1—499	32	36
\$500—999	17	16
\$1000—2999	28	32
\$3000—4999	8	8
\$5000—9999	4	3
\$10,000 or more	3	2
Total	100%	100%
Average legal expense	\$1647	\$1516
Number of cases	117	117

that, when compared with the data from the hospital validity check, data from claimants' lawyers appear to provide a slightly more accurate estimate of aggregate medical expense than data from claimants (obviously, however, this source is limited to persons who hired a lawyer).

PART III *FOREIGN SYSTEMS OF REPARATION FOR
AUTOMOBILE INJURIES*

Introduction

Many competent experts have described the rules of personal liability for automobile injuries in countries of Western Europe.* They have pointed to the diminution in the role of "fault" in imposing liability on an automobile owner, and in barring the compensation of an injury victim. Sometimes they have also pointed to the relative speed of getting to trial, and the absence of a contingent fee system for claimants' lawyers. There is no present need to add to the wealth of informative literature on this subject. But these authorities have little if anything to say about the regimes of public and private insurance—other than liability insurance—which supplement the personal liability system.

One lesson which emerged from the present study of reparation in the United States, and particularly in Michigan, was the important part played by loss insurance systems, both private and public. Indeed, it appeared that the collective role of the direct loss insurance systems was almost as great as that of the liability system (insured and uninsured). It also appeared that some elements of loss insurance—particularly health insurance and social insurance—have grown much more rapidly than liability insurance over the past twenty years, and may be expected to increase their prominence in the years ahead.

This discovery suggested an inquiry into the role of non-

* Bolgar, "Motor Vehicle Accident Compensation—Types and Trends," *Am. Journ. of Comp. Law*, Vol. 2 (1953), p. 515.

Esmein, "Liability in the French Law for Damage Caused by Motor Vehicle Accidents," *Am. Journ. of Comp. Law*, Vol. 2 (1953), p. 156.

Ehrenzweig, "Assurance Oblige—A Comparative Study," *Law and Contemp. Prob.*, Vol. 15 (1950), p. 445.

Tunc, "Establishment of 'Fonds de Garantie' to Compensate Victims of Motor Vehicle Accidents," *Am. Journ. of Comp. Law*, Vol. 2 (1953), p. 232.

Von Mehren, *The Civil Law System*, p. 436. Englewood Cliffs, N. J., Prentice-Hall (1957).

Editorial comment, "Tort Liability for Negligent Operation of a Motor Vehicle in Germany and in the United States," *Duke Law Journ.*, Vol. 1960, p. 579.

liability regimes in other advanced countries of the Western world, especially since these countries are well known to have anticipated the United States in the development of health and social insurance. An Englishman, a Swede, a Frenchwoman, and a German were invited to submit reports on total reparation for automobile injuries in their respective countries with particular emphasis on regimes other than personal liability. They were not given a questionnaire nor an outline, but were asked to describe what they considered to be the most significant aspects of the subject.

Several important points emerge from these independent reports. Probably the most striking feature to the American observer will be the fact that health and medical expenses are so largely cared for without resort either to the patient's savings or to the liability of a tort-feasor. One is also impressed by the ready availability of disability benefits, which are not limited to cases of permanent and total disability, nor to disabilities incurred "in the course of employment."

There are also some interesting disclosures about the personal liability, or tort, regime. One finds no example of the solution so often proposed in the United States—the abolition of the personal liability claim. In all of these countries, the liability suit has persisted alongside the social insurance and voluntary insurance plans. The personal liability suit is buttressed, as in a few American states, with compulsory liability insurance, but with a dramatic difference; there are, in England, *no insurance limits*, and the compulsory insurance limits in Germany are much higher than in the United States.

Finally, the reports touch on a vital problem which American justice has largely ignored—the overlapping of reparation regimes. France and Germany allow the Social Security funds to obtain reimbursement from the tort-feasor, with a corresponding deduction in the injury victim's claim. England is full of compromises; hospitals are permitted to claim reimbursement from

tort-feasors, but at anachronistic rates; injury victims' damages for loss of income are diminished when reparation is payable from Social Security, but by only *one-half* of the overlapping amount. The practical-minded Swedes have decided that the pursuit of reimbursement is merely an expensive way of shifting money from one pocket to another, and have abandoned it.

These and other instructive aspects of reparation in selected foreign countries are illuminated in the following national reports.

TABLE OF COMPARATIVE ELEMENTS OF REPARATION

The following table summarizes a few of the elements touched on in the various national reports. Obviously this table required gross oversimplification; for an accurate representation readers are referred to the text of the reports.

Rights of An Employed Worker Injured in An Automobile Accident

<i>Rights recognized</i>	England	France	Germany	Sweden
—against negligent operator	yes	yes	yes; negligence presumed	yes; negligence presumed
—against non-negligent employer of negligent operator	yes	yes	no, but presumed neg.	?
—against owner, with no negligence	no	yes— "custodian"	yes— "holder"	no; but liable for driver, whose negligence is presumed
—against public fund for medical care	yes	yes (major fraction)	yes	yes
—against public fund for part of lost income	yes	yes	yes	yes
<i>Reinforcement of tort remedies</i>				
—compulsory liability insurance	yes (no limits)	yes	yes (high limits)	yes (high limits)
—provision for victims of uninsured	yes	yes		yes

<i>Rights recognized</i>	England	France	Germany	Sweden
<i>Plurality of remedies</i>				
—sick leave pay	mitigates tort damages		subrogation to tort claim	subrogation to tort claim
—workmen's compensation	partial mitigation of tort claim		subrogation to tort claim	subrogation to tort claim
—public medical care	partial subrogation	subrogation	subrogation	mitigates tort damages
—public lost income replacement	partial mitigation of tort claim	subrogation	subrogation	mitigates tort damages
—private property insurance	subrogation to tort claim		subrogation to tort claim	subrogation to tort claim
—private life, health & burial insurance	cumulative		cumulative	mitigates tort damages

CHAPTER 11

Automobile Injury Reparation in England

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A. GENERAL PRINCIPLES OF THE LAW OF TORT RELATING TO AUTOMOBILE ACCIDENTS

The rights of the victims of automobile accidents in England depend on the ordinary law of torts. In practice, that means that the law of negligence is the only relevant tort. Except in one particular, there is little room for the operation of statutory negligence. That exception relates to the Highway Code, a set of directions for the guidance of persons using roads made under statutory authority by the Minister of Transport: it is enacted that failure to comply with any provision of the Code may be relied on as *prima facie* evidence of negligence.¹ Apart from the Highway Code, there are of course innumerable statutory provisions concerning road traffic: about the construction and use of vehicles, about traffic infringements, and so on. When violations of statutes are held tortious in England, this is because English law recognizes a tort quite independent of negligence, the action for breach of statutory duty. If this action is to lie, the court must find an intention on the part of Parliament to confer on the victim a cause of action for the statutory violation—Parliament almost never expressly states such an intention. Here we notice a remarkable distinction between industrial accidents and road accidents. The courts uniformly hold that statutes laying down safety regulations in factories and mines impose a liability in tort upon those who violate them toward injured workmen. On the other hand, the courts have also held consistently that

¹ Road Traffic Act, 1960, 8 & 9 Eliz. 2, c. 16, §74.

when motorists violate road traffic statutes, e.g., by having defective vehicles or no red rear lights at night, they do not thereby become liable for breach of statutory duty to accident victims. Why the courts read into factory legislation but not into road traffic legislation this implication of liability in tort is inexplicable. This different approach is the main reason why there are far more actions by workmen against employers arising out of industrial accidents than there are actions by traffic casualties. The workman can often succeed without proving fault; the traffic victim must establish negligence.

Where the plaintiff is guilty of contributory negligence, his claim is not thereby defeated, but the damages recoverable are reduced to such extent as the court thinks just and equitable having regard to the plaintiff's share in the responsibility for the damage:² this is a general rule, which therefore also applies to road accidents. Similarly, where there are two or more wrongdoers, any wrongdoer may recover contribution from the others, the amount of contribution recoverable from any such other wrongdoer being such as may be found by the court to be just and equitable having regard to the extent of that person's responsibility for the damage.³

There are no statutory restrictions on members of one and the same family suing each other for damage sustained in road accidents: parents may sue children, children may sue parents, and husbands and wives may sue each other. Nor are there any obstacles in the way of passengers suing the driver. English law has neither a family-car doctrine nor guest statutes. Nor is the doctrine of *volenti non fit injuria* applied so as to effect any important restriction on the claims of passengers: unless perhaps a passenger were to accept a ride from a driver whom he knew to be so drunk that he would be quite unable properly to handle the

² The Law Reform (Contributory Negligence) Act, 1945, 8 & 9 Geo. 6, c. 28, §1.

³ The Law Reform (Married Women and Tort-feasors) Act, 1935, 25 & 26 Geo. 5, c. 30, §6.

automobile, the passenger would not be deemed by the courts to have accepted the risk of careless driving.

Almost every claim for damages arising from a road accident is decided by a judge sitting alone, without a jury. This is not because plaintiffs prefer trials without juries, but because all tort actions (with a few exceptions, of which negligence is not one) are required by statute to be tried ordinarily by a judge.⁴ The Act does permit a court to allow, at its discretion, trial by jury at the request of a litigant, but in practice a request for a trial by jury would never be granted in an automobile case. No doubt plaintiffs would have trial by jury if they had the choice.

B. LIABILITY INSURANCE

Since 1930 it has been compulsory for users of motor vehicles to be insured against third-party risks; breach of these requirements is an offense punishable either by imprisonment or fine. The insurance must cover liability for death or bodily injury except to passengers and to persons employed by the insured who are injured in the course of that employment. What is required is that the insurance covers the user of the vehicle, not the personal liability of the individual driver. Thus if the user of the vehicle by the company which owns it is properly covered, it does not matter if the insurance does not cover the individual employee of the company who was driving for his personal liability to the person injured. It will be observed that compulsory insurance has no financial ceiling: the entire liability, however large, must be covered.

What is the position of the victim if the motorist has failed to carry out his statutory obligation to insure? The surprising answer is that he will still recover any damages to which he is entitled. A consortium of automobile insurers, known as the Motor Insurers' Bureau, has entered into a formal agreement

⁴ Administration of Justice (Miscellaneous Provisions) Act, 1933, 23 & 24 Geo. 5, c. 36.

with the Ministry of Transport. The Bureau will satisfy any judgment obtained in respect of a liability compulsorily insurable against any person or persons, irrespective of whether covered by a contract of insurance or not, insofar as it is not satisfied within seven days after it has become enforceable. The Bureau must be notified of the litigation so that it has the opportunity to defend: in effect it then handles the claim just as an insurance company handles one against its assured. The agreement between the Bureau and the Minister of Transport confers no legal rights on traffic victims, but their *de facto* rights are as valuable as if the driver were properly insured. The operations of the Motor Insurers' Bureau presumably are not to be regarded as pure philanthropy on the part of insurance companies: probably the cost is merely shifted to the insured motorists in higher premiums, and perhaps the insurance companies feared nationalization of road traffic insurance by the Labour Government in office at the time if they did not sign the agreement.

Although such insurance is not compulsory, a very large number of motorists take out a comprehensive insurance which covers also damage to property, including automobiles, and liability to passengers. There are no official figures on the proportion of motorists who take out comprehensive cover beyond the compulsory third-party insurance. In parliamentary debate in 1961 the Ministry of Transport seemed disposed to accept that one-third of England's motorists (i.e., two millions) are not insured against liability to passengers; in addition almost none of its two million motor cyclists will have insurance cover for injuries to pillion riders.⁵

C. THE EXPENSES OF MEDICAL TREATMENT

Under the National Health Service Act, 1946, everybody is entitled to medical and hospital treatment free of charge; the

⁵ A "pillion rider" in British argot is the motorcyclist's passenger who rides on a saddle behind the cycle operator.

patient has to pay 2/- (\$.28) for each medicine or drug prescribed.

There is a significant difference between American and English law with regard to the recovery of damages for medical and hospital treatment. In the United States it is generally accepted that the basis of recovery is the generalized value of these services. English courts are not explicit about the basis of recovery; it might be on the ground that expenses reasonably incurred in alleviating injuries are recoverable, but probably they are recoverable as reasonable expenses likely to be incurred as a nonremote consequence of the defendant's wrong. There is no support in English cases for the view that the *value* of the services is recoverable as such. It follows that when a person is treated free under the National Health Service he has no claim against a wrongdoer for the value of that treatment; he has incurred no expense, and therefore he has no claim. The National Health Service legislation does not empower the fund to recover the cost of medical services from the wrongdoer, and no principle of English common law supports such a right of recovery. Ordinarily, therefore, whenever a person has medical or hospital treatment under the National Health Service for injuries occasioned by a tort, the wrongdoer has to make no contribution either to the victim or to the State toward the cost of that medical and hospital treatment.

There are some special rules which affect traffic casualties only. Whenever an insurer makes a payment to a traffic victim under a road traffic policy, and that victim has, to the insurer's knowledge, received hospital treatment, whether as an inpatient or as an outpatient, the insurer is required by Section 212 of the Road Traffic Act, 1960, to pay to the hospital the reasonable cost of such treatment, not exceeding in all £50 (\$140) for each inpatient, and £5 (\$14) for each outpatient. This section applies to injuries to all victims covered by the policy; so that where a passenger is injured and the policy is comprehensive the insurer is

liable for the cost of hospital treatment although insurance against harm to passengers is not compulsory.

Section 213 provides that where medical or surgical treatment or examination is immediately required as the result of bodily injury to a person caused by the use of a motor vehicle on a road, any hospital or qualified medical practitioner rendering that treatment is entitled to recover *12s.6d.* (\$1.75) in respect of each person treated from the person using the vehicle or his insurer. Liability under this section is incurred regardless of whether the car user has committed a tort.

These provisions were originally introduced in 1930 at a time when most of Britain's hospitals were voluntary, and dependent on charity, but they were reenacted unaltered in the Road Traffic Act, 1960. Where in fact the user of the vehicle is not covered by insurance, the Motor Insurers' Bureau does not make these payments.

Hospitals are entitled to claim under both sections, whereas medical practitioners may claim only under the emergency treatment provisions of Section 213. Medical practitioners hardly ever do submit claims. If they are in the National Health Service, they are entitled to recover under the National Health Service regulations for any emergency treatment (whether arising out of road accidents or otherwise) to persons who are not their regular patients. (There is no English decision that a doctor who renders emergency treatment to a person who is not his patient is entitled to recover from the person treated the reasonable value of those professional services.) Medical practitioners who are not within the National Health Service scheme obviously regard the sums recoverable as too small to be worth collecting. The British Medical Association has asked the Government to increase the payments, but without success.

The Ministry of Health has laid down in a memorandum detailed rules on how National Health Service hospitals are to charge for further treatment under Section 212 (it will be re-

called that the rates for emergency treatment under Section 213 are prescribed by the section itself). They are to charge inpatients in the light of the net cost of maintaining a patient at the particular hospital; a fixed rate of 12s.6d. (\$1.75) is laid down for the first attendance of an outpatient, and 3s.0d. (\$.42) for each subsequent attendance.⁶ Therefore all National Health Service hospitals do claim as a matter of course for both further treatment and emergency treatment.

In 1961 a branch of the Chief Financial Officers of the various hospital management committees under the National Health Service reported the results of their inquiry into the cost of hospitals' collecting income arising under the Road Traffic Act. They made a detailed examination of the accounts of 120 hospital groups representing over a 40 percent sample of the entire country. The total income received for emergency treatment under Section 213 was £38,750, and the cost of collection £34,676, i.e., 89.5 percent. In 37 of the 120 groups the cost of collection exceeded the income recovered. The income from further treatment under Section 212 was £130,455, and the cost of collection £20,434, or 15.7 percent. The total income in England and Wales for the tested year was £357,113, about which the following estimates may be made in the light of the sampling: that £82,000 income for emergency treatment cost £73,000 to collect, and that income from further treatment was £275,000 and cost £43,000 to collect. The Report pointed out that the maximum charge of £50 for inpatients was worth 15 weeks of inpatient treatment when it was fixed in 1930; the figure has never been changed since, and now is scarcely equivalent to two weeks' hospital treatment.

The Report considered three possible reforms with regard to claims by hospitals. First, that there should be an increase in the charges to take account of the rise in hospital costs since 1930. Second, that the system of payments should be abolished on the

⁶ Ministry of Health Circulars H. M. (54) 76, (55) 79.

ground that it was an anachronism since the virtual disappearance of charity hospitals. Third, that insurance companies should make annual commuted payments to the state by agreement between the companies and the Treasury, based on the past claims records of the companies. Plainly, the present system, with its very high collection costs, is indefensible. Whether the effort of shifting a loss from the state to insurance companies and thence to automobile users is worthwhile is an open question; it is certainly not obvious why there should be such a system for road accidents and not, say, for industrial accidents, where insurance, though not compulsory, is virtually universal. This inquiry shows that case-by-case collection of hospital charges can never be anything but expensive. If the system is to continue, a scheme for commuted lump sum annual payments seems desirable. Similarly, if there is any case for paying medical practitioners who are outside the National Health Service scheme whenever they furnish emergency treatment to traffic victims, the present rate is far too low.

The vast majority uses the free medical facilities provided by the National Health Service. Section 2 (4) of the Law Reform (Personal Injuries) Act, 1948, provides as follows:

In an action for damages for personal injuries (including any such action arising out of a contract) there shall be disregarded, in determining the reasonableness of any expenses, the possibility of avoiding those expenses or part of them by taking advantage of facilities available under the National Health Service Act, 1946. . . .

If then a plaintiff has incurred medical or hospital expenses before trial, he will be able to recover them even though he could have obtained free facilities under the National Health Service Act, provided that the expenses are in other respects reasonable. A plaintiff who gives evidence that he intends to have his future treatment outside the National Health Service scheme is entitled to the full estimated expenses discounted to their present worth. The test of reasonableness of the expenses is

objective so that the plaintiff's station in life and his means must be ignored; and even if he states that only in the event of his winning the action will he go outside the scheme, he is still entitled to that full estimated expense.

In view of this predominant reliance on the National Health Service, private medical insurance is not taken out by many. Rather less rare is accident insurance whereby specific sums are payable for defined disabilities, e.g., the loss of an eye or a leg. In the leading case of *Bradburn v. Great Western Ry.*, it was held that a sum received by the plaintiff in respect of such an accident insurance policy cannot be applied in reduction of the damages awarded to him for his personal injuries.⁷ It follows therefore that the insurer has no claim against the wrongdoer, who cannot be required to pay twice; nor is the principle of subrogation applicable to accident insurance. There is no decision on the proceeds of a medical and hospital insurance policy, as distinct from an accident policy, no doubt because such policies are few. Notwithstanding the general antiplaintiff attitude of the English courts on questions of damages (typified by a recent decision of the Court of Appeals that sums received by an American serviceman by way of disability pension must be deducted from an award of damages),⁸ it is thought that *Bradburn's* case would apply so that the plaintiff could recover his entire damages without deduction for the sums payable under a medical and hospital policy—the fact that the plaintiff has incurred a contractual obligation to the doctor should be enough to make them recoverable as medical expenses incurred by him. In that event, once more the insurers would be precluded by the double recovery rule from claiming against the wrongdoer.

D. LOST INCOME DURING DISABILITY

Established civil servants, some other employees in public serv-

⁷ [1874] L. R. 10 Ex. 1.

⁸ *Browning v. The War Office*, [1963] 2 Weekly Law Reports 52.

ice, most persons holding administrative posts in private industry and many other white-collar workers will be entitled to a continuance of their salary or to a reduced amount of pay for some weeks each year during which they might be disabled through injury, whether sustained in road accidents or otherwise. Very few manual workers have such rights, although no doubt employers occasionally make *ex gratia* payments to long-service employees in great distress. No statistics are available, but it would be surprising if more than one half of the working population were entitled to receive salary or wages from their employers while off work through disability.

Britain has a comprehensive system of social security, the funds for which are provided in part by employees, in part by employers, and in part by the State. When a workman is injured in the course of his employment,⁹ he becomes entitled to industrial injury benefit for the first six months of his incapacity. When industrial injury benefit expires (after six months) he will then claim sickness benefit. If he has sustained some permanent or substantial loss of faculty, he will also be entitled to industrial disablement benefit, the rate of which is increased when constant attendance is necessitated. The rates of industrial injury and sickness benefit are uniform (regardless of the loss of earnings) and are increased where there is a dependent wife or children. About 10 percent of sickness benefit recipients will succeed in having these benefits supplemented by national assistance benefits on the ground that their needs cannot be met by sickness benefits alone. It would be pointless to state in detail the amounts of these various items of social security, all of which are weekly cash payments. In summary, from the wealth of statistical material available, one concludes that total benefits payable to men off work average rather less than one-third of the average weekly

⁹ The "course of employment," as in the United States, excludes the ordinary trips between the worker's home and place of employment.

earnings of the male fully employed in industry.¹⁰ These social security benefits—whether for “industrial injury” or for “sickness”—provide no more than the bare minimum for subsistence at a very low level.

As we have observed, some take out private insurance to provide them with a lump sum in the event of specific forms of disability. It would be very rare for a victim of a road accident to be entitled by insurance to periodic payments in lieu of salary or wages for the duration of his disability. Charity is an even less important source of subsistence and can properly be ignored for this purpose.

If an employer who was under no prior contractual obligation to do so makes a loan or advance of wages to a disabled employee on the understanding that the employee will repay if he recovers it from a wrongdoer, the defendant is not entitled to deduct that sum from damages awarded against him.¹¹ On the other hand, no English case has held that the employee can recover in full where the employer has contracted to pay money to his employee during his incapacity. In the present mood of the English judges, it is to be feared that they would deny the employee any such recovery; they would gladly seize on the argument, however fallacious, that his claim is for loss of wages, and that he has lost no wages when his employer has paid them during his disability. At the same time the Court of Appeals has held that where the plaintiffs were compelled by statute to pay an injured policeman at his ordinary rate of pay so long as he remained a policeman, they could not recover in quasi-contract or restitution from the wrongdoer who disabled the policeman those sums paid by them to the policeman.¹² At one time the employer had another means

¹⁰ For a detailed working out of this from the Annual Abstract of Statistics by the Board of Trade, the Digest of Statistics Analysing Certificates of Incapacity by the Ministry of Pensions and National Insurance, the Census of Population Statistics, and the Ministry of Labor Gazette, see Street, *Principles of the Law of Damages* (1962), Chapter 5.

¹¹ *Dennis v. London Passenger Transport Board*, [1948] 1 A11 E. R. 779.

¹² *Monmouthshire County Council v. Smith*, [1957] 2 Q. B. 154.

of redress in the shape of an action for loss of services in which these payments could be treated as an element of damage. Recently, however, the courts have gone out of their way to extinguish as many of these relational torts as possible, and they have taken the entirely new line that the action for loss of services is an anachronism to be confined to loss of the services of menial or domestic servants.¹³ There is a windfall for the defendant whenever he is fortunate enough to choose a victim whose employer is contractually bound to pay his wages: neither the employer nor the employee can recover them from him.

There is one expedient whereby the defendant can be made to pay. The Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services illustrates:¹⁴

An officer who is absent as the result of an accident shall not be entitled to an allowance if damages are receivable from a third party in respect of such accident. In this event, the authority may, having regard to the circumstances of the case, advance to the officer a sum not exceeding the sickness allowance provided under this scheme, subject to the officer undertaking to refund to the authority the total amount of such allowance or the proportion thereof represented in the amount of damages received.

This provision seems fully effective to ensure that the employee receives his entitlement and that any tort-feasor responsible ultimately bears the loss. But there is no evidence that it is widely used outside the local government service. None of the precedents of service agreements in industry contained in the standard books has any such provision; regulations for civil servants are equally silent on the point. Therefore, in the large majority of cases where employers pay earnings or sick-leave allowances to the victims of

¹³ *Attorney-General for New South Wales v. Perpetual Trustee Co. Ltd.*, [1955] A. C. 457.

¹⁴ March 1958, para. 16 (3) (f).

road accidents, the employer obtains no recoupment from the wrongdoer.

When Britain's pattern of social security arrangements was drastically overhauled at the end of the 1939-45 war, there was controversy about the relation between social insurance and tort liability which led to the setting up of a committee by the Government. This Department Committee first pointed out in its Report¹⁵ that the scale of social security benefits would remain much below the amount of damages recoverable at common law so as to make a common-law action still worthwhile. There was a conflict on the Committee whether an injured person would recover both his social security benefits and his common-law damages. The majority reported that the same need would be met twice over if both were recoverable. The minority, consisting of trade union interests, argued that there was a close analogy between social security and private insurance, and dismissed as unimportant the risk of excessive litigation. The government compromised by enacting the following provision in the Law Reform (Personal Injuries) Act, 1948:¹⁶

- (1) In an action for damages for personal injuries (including any such action arising out of a contract) there shall in assessing those damages be taken into account, against any loss of earnings or profits which has accrued or probably will accrue to the injured person from the injuries, one half of the value of any rights which have accrued or probably will accrue to him therefrom in respect of industrial injury benefit, industrial disablement benefit, or sickness benefit for the five years beginning with the time when the cause of action accrued.

This section makes no reference to unemployment benefit. In the one first instance decision on that, the plaintiff claimed damages for loss of wages; although his injuries did not render him unemployable, it was assumed that they had caused him to be

¹⁵ Cmd. No. 6860 (1946).

¹⁶ 11 & 12 Geo. 6, c. 41, §2.

unemployed up to the date of trial. The trial judge deducted in full from the special damages for loss of wages the unemployment benefit received by him.¹⁷ Whether this decision will be followed is uncertain.

The Act of 1948 made no provision for the social security fund's obtaining any recoument of the one half portion of benefits, and the common law does not permit such a recovery.

E. DAMAGE TO PROPERTY

We have seen that a considerable number of motorists take out comprehensive insurance under which damage to the insured's automobile and any other vehicle is covered. The insured will then be indemnified to the full value which he has declared in respect of his own automobile, and will be covered without limit in respect of automobiles and other chattels of third parties which he damages.¹⁸

Insurance companies have knock-for-knock agreements with each other whereby they never litigate in respect merely of damage to automobiles when each vehicle is insured. So accepted are knock-for-knock agreements that bodies like the Crown which do not have to insure their own vehicles have similar agreements with insurance companies in respect of collisions between Crown and private vehicles. These agreements are obviously an important factor in reducing the expenses of automobile insurance. Nonetheless, the commission and expenses of automobile insurance are more than 50 percent of the sums paid out on claims and about one-third of the gross premiums paid.¹⁹ Knock-for-knock agreements are unpopular with motorists, who often complain

¹⁷ *Lindstedt v. Wimborne SS. Co. Ltd.*, [1949] 83 Lloyd's List L. R. 19.

¹⁸ British collision insurance is usually subject to no "deductible," or to a deductible of, at the most, five pounds (about \$14.00). The usual policy form contains no indemnity limit other than that imposed by the value of the designated automobile.

¹⁹ The Insurance Companies Act, 1958, 6 & 7 Eliz. 2, c. 72, requires the annual publication by Her Majesty's Stationery Office of Statistics which include the items set out in the text.

that they are deprived of their no-claims bonus (reductions in annual premiums when no claim is made on the insurers) by settlements for accidents in which they were free from negligence.

Where the owner of the damaged vehicle has comprehensive cover but the owner of the other vehicle involved has not, he will obtain indemnity from his insurers, who will elect whether to pursue their subrogated rights against the other driver. A comprehensive policy normally insures baggage in the automobile up to a certain limit. Separate baggage insurance for baggage carried in one's own automobile is rarely effected. A comprehensive policy will cover damage to the clothing of third parties, but not to the clothing worn by the insured.

F. IMMEDIATE SOURCES OF RELIEF

The problem of directly paying hospital bills does not arise for the average British traffic victim, for, as we have seen, he will receive his entire treatment free of charge under the National Health Service. If his car is comprehensively insured, he will normally proceed forthwith to have the necessary repairs to it carried out, leaving it to his insurers to meet the garage bill and to negotiate with the other driver or his insurers. Sickness benefit or industrial injury benefit is payable weekly and at once from the local office of the Ministry of Pensions and National Insurance, so that the bare subsistence needs are met throughout the victim's incapacity. He may also obtain national assistance to take account of inescapable additional financial burdens such as house rent. Still, it is obvious that pending satisfaction of any claim in tort the ordinary victim of a road accident will either have to draw on his savings (if any) or else reduce his living standards, for most of these victims will have neither private insurance nor sick pay.

Delays in litigation are not serious. If the claim does not exceed £400 (\$1120) the local county court has jurisdiction, and there is no reason why the victim should not have judgment in three to six months from the accident. Claims above that

figure are tried in the High Court (unless both parties accept the county court as the forum) where the gap between accident and trial is more likely to be a year. Settlements are of course much more numerous than trial verdicts, and it is impossible to estimate the average delay between accident and out-of-court settlement. The very comprehensive national system of legal aid available for most actions (including automobile accidents) is relevant here. No litigant need be constrained to accept a harsh settlement or deterred from undertaking litigation because he lacks the necessary capital resources to initiate proceedings. Even if he loses, a legally aided person does not have to pay the legal costs of his opponent. The only category of plaintiff who is in a dilemma about whether to sue is the man who falls outside the fairly generous financial means test of Legal Aid, but who is not assured of success in his action: if he loses, he will have to pay not only his own costs but those of his opponent. (The system of contingent fees is forbidden.) He too is likely to be tempted by an offer of settlement, for if the defendant pays into court a sum by way of settlement which the plaintiff rejects, and, although the plaintiff then succeeds at trial, he is awarded a sum of damages less than that paid by the defendant into court, the plaintiff will still have to pay his own and the defendant's costs since the date of that payment in. The legally aided plaintiff will receive all the damages awarded to him by the court. Other plaintiffs, because of the rule that the loser pays the winner's costs, will rarely have more than £100 (\$280) deducted for any additional expenses not to be borne by the defendant.

G. GAPS IN THE PROVISION FOR THE ACCIDENT VICTIM

Facilities for medical rehabilitation of traffic victims are adequate. Physiotherapy falls within the ambit of national health service hospitals and is amply available to all free of charge. Vocational rehabilitation is a matter for the Ministry of Labor, which has regional centers throughout the country providing free

residential services. At the same time, many doubt whether these facilities for vocational rehabilitation are as good as they should be. It is therefore doubtful whether accident victims can rely on obtaining all the useful vocational rehabilitation which they require. In theory they would be entitled to make fee-paying arrangements for private training and debit it to the defendant, but this rarely happens, especially because no such network of fee-charging institutions exists.

I have shown elsewhere²⁰ that the level of damages in personal injury actions in England is inadequate. This is particularly true of the permanently and totally disabled, who will rarely receive full compensation for the loss of their future earning capacity: they will be fortunate if their total damages, i.e., including those for pain, suffering, and loss of amenities, equal their loss of earning capacity, and tax is always deducted in calculating earnings loss. The permanently partially disabled are also undercompensated, though by a lesser amount than the totally disabled. The lot of both is grave if they are to live out their lives in an era of inflation, for not only are the judges prone to undercompensate on the existing data, but they also make no allowance for future diminution of the pound's spending power. All damages are in the form of a lump sum, and there are no official facilities for managing these capital funds put in the hands of victims. There has been no research into the post-award careers of these disabled recipients, but it would be very surprising if many of them do not squander the sums awarded and live their lives in conditions of poverty dependent on state assistance for subsistence. The state, through the courts, does control lump sum awards to widows and infants, but it has been inept in its investment management. For instance, the High Court had lost 56 percent of the purchasing power of awards made in 1947 by some ten years later, and the court even lost 27 percent of the capital value of awards made in 1954 within the next four years.

²⁰ Street, *Principles of the Law of Damages* (1962), especially Chapter 5.

H. EFFECTS OF NON-TORT REPARATION ON TORT SUITS

England's annual *Civil Judicial Statistics* is a meager document which does not make an independent breakdown of tort suits arising out of road accidents; insurance companies do not furnish any figures; no research on it has, it is believed, been carried out. In 1961 the Ministry of Transport stated that it had no information about how many traffic victims went uncompensated. Consequently, nothing is known about the number of suits relative to accidents either now or in any given previous year. It is a safe guess that the number of suits is very much smaller in relation to population and traffic density than in the United States. There are several possible reasons: the free medical and hospital services and the social security benefits normally ensure that the ordinary traffic casualty is not driven into debt; knock-for-knock agreements take care of much automobile damage; the level of awards is so much lower that litigation has little "gambling" attraction; the traffic victim will certainly not be touted by any lawyer or his representative, with a "contingent fee" bait; nor, unlike his fellow victim at work, will he have a trade union legal department at hand to take over his litigation; perhaps the unsophisticated Englishman is less claims-conscious than the American. There does not seem to have been any recent change in the relative number of suits by traffic victims.

I. CONCLUSION

Perhaps the main conclusion to be drawn from this report on how automobile accident victims fare in England is how little is known about the subject and how little interest has been taken by lawyers in it. The obvious legal problems, such as: Should there be liability without fault for automobile accidents? arouse singularly little discussion. Neither lawyers nor social scientists have made factual investigations into financial provision for victims of the kind carried out by Columbia University and now the University of Michigan. Nothing is published about solutions

attempted in other parts of the world. How much data motor insurance companies have accumulated and analyzed is unknown; they are notoriously coy at publishing information bearing on damages arising from traffic accidents. It would be wrong to assume from this that there is no problem in England; it simply has not been faced.

CHAPTER 12

Reparation for Personal Injuries in Sweden

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INTRODUCTION

Sweden has a complicated and extensive system of medical and social security, which among other things gives aid and reparation to the victims of accidents. It is supplemented in this task by private insurance and tort liability. Comparatively little is known, however, about the actual state of reparation of personal injuries. There are several reasons for this lack of knowledge. One is the general lack of information concerning the practical effects of legal rules. Another is the fact that the rules bearing on reparation are not focused merely on accidents, but on a much broader scene. They confer benefits which do not depend on the occurrence of an accident, and which are not measured by the extent of the loss. On the other hand, there are a few rules on reparation which apply only to special kinds of losses such as automobile and industrial accidents.

This intermingling of policies and effects appears in the growth of the various means of reparation. At the beginning of this century the law of torts, based mainly on the principle of negligence, provided the chief means of reparation. Accordingly, the special circumstances under which an accident arose decided whether there was any right to indemnity. The lack of solvency among tort-feasors restricted the possibility of recovery for those entitled to indemnities. "Poor relief" was another, very unsatisfactory, means of aid, for which bare necessity alone decided how much the victim should receive. Reparation was first improved for special kinds of accidents, principally some industrial injuries and

motor accidents, on the theory that the particular risk connected with the activity demanded special indemnification. Later, the right of compensation for industrial injuries came to be regarded as part of the workman's wages, and since 1916 all employees have been entitled to it, even if their occupations involve no special risk. As a part of the same reform, the special liability of employers was also changed into a duty to contribute to compulsory insurance. In 1929 automobile third-party insurance also became compulsory.

The relative importance of insurance limited to special kinds of accidents has, however, diminished as the general system of medical security has developed. General health insurance, covering temporary disability, came into force in 1955. Compensation for permanent disability was unsatisfactory at first, but has gradually improved along with the organization of an extensive system of pensions to those who retire, who are disabled, or who are left without support by the death of the breadwinner. In 1962 the earlier statutes on general health insurance and pensions were coordinated into one "Act concerning General Insurance" (*Lag om allmän försäkring den 25 maj 1962*). In addition to the growth of general health insurance, there have been increases in the coverage of voluntary liability insurance, and voluntary direct loss insurance against accidents.

In the following discussion the basic system of medical and social security will first be surveyed, with some indications of its limits. Later the other means of compensation, which depend either on the injured person's own special protection or on the circumstances of the accident, will be sketched.

A. THE "GENERAL INSURANCE" PROGRAM

The system of medical security aims primarily at meeting the needs of the common man. An underlying idea seems to be that for him even small expenditures may be serious and must therefore be covered, whereas the need for compensating his whole

loss of income is less urgent. Providing care at a satisfactory medical standard is more important than maintaining a freedom of choice, and the comfort of the patient must be secondary to medical needs. On the other hand, the system is not limited to the minimum standard, and both compensation for loss of income and the contributions from those protected by the system are scaled according to the income.

1. *Hospital Bills*

Expenses for hospital care will not generally be of much concern to an accident victim. Most Swedish hospitals are operated by municipalities—counties or cities—which raise practically all the necessary funds by taxation. The patient who lies in a public ward in a hospital belonging to his home municipality is charged only a small sum for the care, which covers all expenses, including doctors' fees, major operations, X-ray examinations, medicine, etc. Moreover, the patient is reimbursed even for this small sum by General Health Insurance which in practice pays the hospital directly. The patient in a private ward in a public hospital pays a larger sum, corresponding to the additional cost of care in such a ward, but doctors' fees and all other treatments are included in this sum. General Health Insurance does not reimburse the patient for this additional outlay, and whether he can be indemnified from other sources will depend on special circumstances, to be mentioned later.

If the need for hospital care arises outside the patient's home municipality—as may well be the case when he is the victim of an accident—he pays a much higher sum for treatment in a public ward, but he is reimbursed for this sum by General Health Insurance. The same rule applies if there is need for hospital care within another municipality, perhaps because no home hospital has the necessary resources. If a patient for some other reason is treated in another hospital than one belonging to his home municipality, he pays the higher sum but is reimbursed only by the

lowest sum for which he could have received care at a public hospital in his home community. This is the case also when a person is treated in one of the few private nursing homes that exist in Sweden.

The freedom of choice of a patient is accordingly limited. Within his home municipality he may to some extent choose where he will be treated, but the choice is in practice restricted by the limitation of hospital resources. The possibilities of choice may also be restricted by the rules regarding reimbursement for travel to and from the hospital, which will place some of the expense for travel on the patient if he goes to a hospital other than the nearest one. As appears from what has now been said, a patient who without a special reason wants to be treated in a hospital which does not belong to his home municipality is in an economically unfavorable position. Moreover, a municipal hospital is under no obligation to receive patients from other municipalities except for emergencies. Altogether, the present shortage of hospital capacity seems to constitute the most serious defect of the system.

2. *Outpatient Fees*

The rules regarding medical expenses for patients who are not hospitalized are less favorable to patients. Only 75 percent of the doctors' fees are reimbursed, and only within an established fee schedule. Doctors in private practice are free to charge more than the established rate, and they often do, in which case the patient may have to cover the rest of the cost himself. But most accident victims go to the hospitals where outpatients are charged according to the established rate, so they can generally count on being reimbursed by the General Health Insurance for 75 percent of the costs.

The costs of care in a convalescent home, of physiotherapy, heat treatments, and the like are also reimbursed up to 75 percent according to specified rules. The same rate of reimbursement

applies to costs of dental care—which is not generally included in Swedish medical security—when it is caused by an accident.

3. *Rehabilitation*

The special expenses incurred by those who are permanently disabled are somewhat less well taken care of. Formerly rehabilitation was neglected in the general scheme of medical security, but its importance is being realized more and more, and it is now in a period of development. Medical rehabilitation—which consists of work-therapy, adaption to living as disabled, acquiring and learning to drive special vehicles—is in the charge of the municipalities. Care in special establishments for such rehabilitation is provided free of charge, whereas the costs of prosthesis, vehicles, and similar expenses are reimbursed at the rate of 75 percent. Vocational rehabilitation, which consists mainly in training in a new occupation, is also provided by the municipalities, although these are partly reimbursed for the costs by the state. The delays in providing such rehabilitation constitute a serious defect in the present system.

4. *Pensions and Disability Benefits*

A person who because of an accident (or because of illness in general) needs permanent care can get either a sum of 1200 kronor a year (roughly \$240) in addition to the disability pension, which will be mentioned later, or, if he does not receive such a pension, a special compensation for disability of 2000 kronor (\$400) a year. The compensation of 2000 kronor can also be granted to persons who, because of disability, have special expenses, such as high transportation costs.

In compensation for loss of income—as distinguished from compensation for special expenses—a distinction is made between temporary and permanent disability. The patient suffering from temporary disability (whether due to an accident or to any other cause) is entitled to a certain sum per day, based on his yearly

income. The minimum income to qualify is 1800 kronor (\$360), and the highest income which is taken into account in the general health insurance is about 22,000 kronor (\$4400), a sum which at present covers the income of most manual workers in Sweden. The sum per day varies from 5 kronor (\$1) in the lowest income group to 28 kronor (\$5.50) in the highest group. The rate of compensation can be computed at about 70 percent of lost income, but since the benefits are not subject to taxes, the indemnification is in fact higher than this figure would indicate, although it is not complete.

There are special rules regarding housewives who have no money income. They receive 5 kronor a day.

The permanently disabled are entitled to so-called advance pensions. The underlying idea is that he who loses his capacity for work at an earlier age than the normal age of retirement is entitled to the same kind of pension as the aged. The amount differs according to the degree of capacity that is lost. For loss of the entire capacity the pension is the same as the corresponding old age pension. For loss of half the capacity—which is the least degree that is compensated—one-third of the full pension is paid. There are two kinds of these pensions, both included in the "general insurance."

The basic pension corresponds to the national old age pension, at present 3325 kronor (\$660) a year for a single person. The right to such a pension is independent of the economic circumstances of the disabled person both before and during disability. It has thus very little of the character of indemnity for loss of income; its principal aim is to provide the means for a minimum standard of living.

As already mentioned, small additional amounts are given to those that have special need of care or special expenses. Other additional amounts are given for wife and children. Generally the municipalities give other additional sums for housing expenses, although only on a means test.

The other pension corresponds to the old age pension which is based on the earned income. Here the main idea is that the right to the pension is part of the past earnings, and the general character is therefore more retrospective than prospective. The advance pension for a fully disabled person is 60 percent of an average past earned income computed by the aid of complicated rules. It depends either on the income during the four years immediately before the disablement occurred or on the total income of the disabled since he reached the age of 16, whichever is more favorable to him. The lowest income that is taken into account is 4000 kronor (\$800) and the highest income is 30,000 kronor (\$6000). The maximum pension is therefore 18,000 kronor (\$3600).

5. *Survivors' Benefits*

If a person is killed by an accident, the rights of his dependents to pensions from public funds is the same as at death from any other cause. Here also we find the distinction between a national pension and a pension based on the earned income.

There is a national pension to all widows, subject to certain conditions regarding the age of the widow, the length of the marriage, and the care of children. The amount differs according to the age at which the woman was widowed. The full pension, which is the same as the national old age pension (or full pension at disability), requires that the woman was 50 or more when she was widowed or that she has children under 16 in her care. Earlier there was a means test for widow's pensions but this has now been abolished.

Children's pensions are given to children under 16 years. The yearly sum is 1000 kronor (\$200) for those who have lost one parent and 1400 kronor (\$280) for those who have lost both parents.

The survivors' pensions based on the earned income are subject to somewhat different conditions. The main principle is that the

widow receives 40 percent of the pension that the deceased received or would have received, had he become entitled to a pension at the time of his death. Children under 19 may also be entitled to pensions based on the earned income of the deceased. These pensions depend on the number of children, on the fact whether there is also a pension to a widow, etc. The maximum—for one child who alone is entitled to a survivor's pension—is 40 percent of the pension of the deceased.

All pensions are subject to taxes, although those that receive only the national pensions often do not attain the lowest income on which taxes are levied.

6. *Source of Funds*

"General Insurance," which has now been sketched insofar as it relates to accidents, is not entirely compulsory. On specific request, it is possible to exclude earned income from sources other than employment. The effect of such a request is to lower both the sums per day received for temporary disability and the pensions dependent on such income.

General Insurance is financed from several sources. A main source is state taxes, another is contributions from the employers (which finance all of the pensions dependent on employment income, and part of the costs of General Health Insurance), and a third is contributions from those that are entitled to the benefits. Hospitals operated by municipalities are financed by local taxes.

7. *Subrogation*

A common feature of this system is that, with few and unimportant exceptions, all benefits received under the system mitigate the liability of a tort-feasor; there is no "subrogation." The injured person cannot claim against the tort-feasor for those expenses which have been defrayed by insurance and public health services, nor can the insurance and health services make a claim for reimbursement. If the victim of an accident that has occurred by a

tort is treated in a public hospital, his own medical expenses, which are all that he can claim in damages, will often be small.

There has never been any subrogation in favor of public hospitals against any tort-feasors. Earlier, there was subrogation in favor of the General Health Insurance against those who had caused injury intentionally or with gross negligence or by motor traffic, but it was abolished by the reform of 1962.

The reasons for this step may have some interest. Subrogation against those that had acted intentionally or with gross negligence had proved absolutely worthless. With accidents due to motor traffic the earlier subrogation rested on the idea that motor traffic should help to carry the burden of acute illness caused by motor accidents. But the sums raised were never great (altogether about 5,000,000 krónor, the equivalent of \$1,000,000, a year), and the social insurers have no wish to spend time on investigating the injury victim's right to tort damages in order to get these comparatively small sums. Moreover, as the group that pays premiums for compulsory motor third party insurance is largely the same as the group that pays taxes and contributions to General Insurance, it was considered unnecessary to move money from one of their pockets to another. When General Health Insurance was merged with the national pensions and earned-income pensions—to which subrogation has never attached—the simplest and most satisfactory rule was to abolish subrogation entirely.

B. INDUSTRIAL INJURIES INSURANCE

Industrial Injuries Insurance, which is regulated by a statute of 1954 (*lag om yrkesskadeförsäkring den 14 maj 1954*), covers not only accidents but some occupational diseases as well. It applies to all employees but not to the self-employed. It is already partly coordinated with the General Insurance, and is at present under revision in order to conform more closely to that insurance. In case of temporary disability the victim of an industrial accident generally receives only the benefits under General Insurance. For

those that are permanently disabled and for dependents of those that are killed the benefits are on the same general level as under General Insurance, but the conditions are partly more favorable. Disability pensions arise on the loss of one-tenth of the capacity for work, the actual instead of the past income can be the basis for a pension, the costs for prothesis are compensated fully, contributions toward funeral expenses are granted, a widow can receive a pension regardless of the length of the marriage, pensions can be granted to others than widows and children, e.g., widowers and parents, etc. If a person is entitled to a pension both from Industrial Injuries Insurance and from General Insurance, three-fourths of the former pension are deducted from the latter one. He accordingly receives a little more in this case than if the right to a pension had arisen entirely under the General Insurance scheme. Altogether, there are more features of indemnification for loss in Industrial Injuries Insurance than in General Insurance.

Industrial Injuries Insurance is financed by employers. Benefits received from this insurance are deducted from recovery in tort. There is subrogation against motorists and against those who have acted intentionally or with gross negligence (as was the case in General Health Insurance before the revision of 1962); but this rule will probably be altered in connection with the expected reform of Industrial Injuries Insurance.

C. VOLUNTARY INSURANCE AND SICK-LEAVE PAY

1. *Accident Insurance*

There are many types of voluntary accident insurance in Sweden. The state insurance systems—including General Insurance and Industrial Injuries Insurance—can to a certain extent be supplemented by voluntary insurance from the same sources. Such insurance is generally cheaper than the corresponding private insurance. It is therefore granted to certain groups only, as when housewives and students are allowed to insure for

sums per day in case of temporary disability in order to get the same kind of protection as other citizens.

In *private* accident insurance various kinds of group insurance are prominent. An interesting species is the rehabilitation insurance which many trade unions have procured for their members. This insurance provides vocational rehabilitation on an individual basis, with the aim of enabling the injured person to be trained in an occupation that will maintain him on the same standard of living as earlier—a goal that is not easily attained. The importance of this private rehabilitation insurance diminishes as the public system of rehabilitation improves.

Most accident insurance—both individual and group insurance—is intended to cover the parts of losses that are left uncompensated by the state insurance systems. Insofar as the insurance applies to actual expenses and losses—medical, travel, etc.—it covers only expenses for which the insured is not reimbursed by state insurance, and even those expenses only insofar as they are necessary. There is always a maximum amount for such expenses fixed in the contract. Within this amount the insurers take a liberal view of what is necessary, and the insured can generally count on being reimbursed for what a specialist whom he chooses to consult will charge him (in excess of the amount that General Insurance pays), and even for the costs of care in a private nursing home. The drawback of the system is that for a slight accident the agreed sum for medical costs will suffice amply for all kinds of care, whereas for a serious accident they will often give only a minor contribution to the total costs. There has been an attempt to introduce hospital insurance of the Blue-Cross type in Sweden, but it has wholly failed to attract customers.

The benefits paid by accident insurance on account of income loss—sums per day for temporary disability and lump sums or pensions for permanent disability and death—are not affected by other indemnification that the insured will receive. There is no subrogation against a tort-feasor for sums corresponding to the

loss of income, since these sums are not taken into account when determining the loss of income of the injured person in assessing damages. On the other hand, there is a limited right of subrogation for the sums for medical costs, but few insurers seem to avail themselves of this right.

2. *Annuity Policies*

Besides, or in addition to, what is known as accident insurance in a strict sense, there are also various forms of private insurance that provide pensions at disability or death, regardless of the cause. Such pensions have existed for a long time for white collar workers and also for many foremen. Their importance is, however, diminishing as the general pensions are improving. Like similar sums from ordinary private accident insurance, pensions are not deducted from tort recovery, and there is no subrogation against tort-feasors.

3. *Sick Leave*

Contracts of employment for better paid employees of private enterprises often provide some kind of protection against the consequences of temporary disability, in addition to what General Insurance affords, but it is impossible to generalize on this point.

State employees and many employees of cities and other municipalities may be protected against the consequences of both temporary and permanent disability by their contracts of employment. Most state officials are entitled to this kind of protection.

Sick-leave payments and pensions from employers are deductible from tort recovery, and the employers are entitled to subrogation. The state makes use of its right to subrogation, at least when considerable amounts are involved.

4. *Life Insurance*

Life insurance is widespread in Sweden, although the amounts are not comparable to those current in the United States. A novel feature is the rapid growth of group life insurance, largely under

collective contracts between employers and employees, which give considerable sums to the dependents of those who die while still in the age of employment. Since accidents are among the principal causes of death at these ages, group insurance must be counted partly as a means of protection against accidental death. Life insurance does not affect other benefits to which the dependents of the deceased are entitled, except that it is taken into account in assessing tort damages for fatal injuries.

D. TORT LIABILITY

In view of the extensive system of public and private protection against illness and death, it might be expected that tort liability would play only a minor role in the reparation of losses due to accidents. No doubt this is true as far as the most basic needs are concerned, and the importance of public insurance will probably increase in the future. But since the system of General Insurance does not aim primarily at the indemnification of losses, there are many gaps left in its reparation. Even those who lose small incomes may be insufficiently indemnified for disability or death, and for the higher income groups the sums per day on temporary disability cover only a small part of the loss of income. No existing kind of insurance gives sufficient protection when an injured person is in need of expensive permanent care. Another important field which is not affected by insurance is compensation for pain and suffering. In any event, benefits and pensions from private insurance are not deducted from damages for loss of income, and do not affect tort liability.

1. *Measures of Damages*

The Swedish rules of assessing damages for personal injuries aim at giving full indemnification for economic losses of the individual injury victim. There is thus no limitation of damages to the level of the "average citizen" (as is generally the case in Denmark and Norway). Damages are assessed very carefully, usually

down to the last penny of every single item. Damages for medical expenses are measured by actual expenses, provided that these are normal for the person under the circumstances. The usual compensation for permanent disablement and for fatal injuries consists of annuities. Lump sums are awarded only in special cases, particularly when the amounts are small. For fatal injuries, those who were legally entitled to support by the deceased become entitled to damages, but in this case the economic circumstances of the dependents are taken into account, and life insurance will often mitigate the liability of the tort-feasor. Damages for pain and suffering are high by Scandinavian standards, but low by American. Ten thousand kronor (\$2000) is an unusually high amount. None but the victim himself is entitled to damages, except for fatal injuries.

2. *Automobile Injuries*

The two most important groups of accidents are—in Sweden as in most other countries—automobile accidents and industrial accidents. For automobile accidents there is, as has been indicated earlier, a compulsory third party insurance, covering damages which are computed according to the rules of the law of torts. The maxima are so high that it is in practice an open-end insurance. The victim of an uninsured or unidentified motorist is entitled to claim damages from any licensed automobile liability insurer; in practice such claims are handled by an association comprising all insurers of this class.

The prerequisites of tort liability for motor accidents are laid down by a statute of 1916. The motorist has the burden of proving that he has not been negligent, but it is comparatively rare that he can escape liability in this way. More important is the reduction of damages due to contributory negligence by the injured person. In cases of very serious contributory negligence, the injured person may lose his right to damages entirely, but more

often the damages are reduced to a fraction between three-fourths and one-fourth.

It has been estimated (in 1955) that between 40 and 45 per cent of the total indemnities paid out from motor third party insurance are for personal injuries, but it remains to be seen what this proportion will be in the future when General Insurance has been fully developed and when Industrial Injuries Insurance may also have been reformed. Most claims based on automobile accidents are settled promptly, but suits for damages for such accidents are among the most common of all civil law suits in Sweden. Often they are tried together with the criminal prosecutions for negligent driving.

3. *Industrial Injuries*

In industrial injuries the employer is liable in tort for his own negligence and for the negligence of an employee in a superior position but not for the negligence of a workman of the same status as the injured person. Indemnities from Industrial Injuries Insurance (and from General Insurance) are, however, deducted from the damages, and subrogation is very restricted, as mentioned earlier. Since most employers have liability insurance covering industrial accidents, the victims can be fairly sure of receiving the damages to which they are entitled. Law suits are neither rare nor particularly common. The importance of the employers' tort liability for negligence is not economically great. Their costs for liability insurance—covering not only industrial accidents but also general tort liability—are only a small fraction of their costs for General Health Insurance and Industrial Injuries Insurance.

For accidents other than automobile and industrial, the main rule of tort is about the same as for industrial accidents. There is no general rule of vicarious liability at present, but the employer is liable not only for his own negligence but also for the negligence of employees in superior positions. Under the usual terms of liability insurance, the employer's insurance covers the

employees' liability for negligence against strangers (although not against employees), with the result that the nonemployed injury victim has the same protection as if the employer had been liable. The state has, however, no liability insurance, and if a man in military service negligently causes an injury, the victim will have a right to damages in tort only against the tort-feasor. There have been complaints that even where the state is responsible, as when a state employee in a superior position negligently causes damage, the state is slower in acknowledging and settling claims than private employers and their insurers generally are.

E. PUBLIC ASSISTANCE AND CHARITY

It remains to mention the role of poor relief, or rather of "public assistance" (*socialvård*) which is the term used at present, and of charity. The importance of public assistance in mitigating the consequences of accidents lies mainly in those cases where the limited compensation provided by social insurance is insufficient to maintain even a low standard of living because of the large family, or similar circumstances, of the injured person. There are also cases where a person, although he receives pecuniary compensation, fails to make such a use of this compensation that he can make a living. Charity has never been important in Sweden from a quantitative point of view, but it can provide relief where other means fail, for instance when a person who needs help in his home cannot get anyone to take care of him, and also in some special cases of rehabilitation.

F. CONCLUSION

Although much is being done for the victims of accidents in Sweden, few people would claim that it is enough. There are still too many people who suffer economic loss more or less permanently because of injuries. But one of the difficulties both in assessing the effect of reparation and in improving the future state is that some of those who are disabled suffer not only from the direct

consequences of the accidents but also from constitutional and environmental drawbacks. Even if they could make a living before the accident, the mental and physical strain of illness and disability affects them permanently and cannot be remedied by pecuniary compensation. Mitigating the consequences of accidents must therefore take the form of active rehabilitation and of improvement of the general conditions of living.

CHAPTER 13

Sources of Reparation for Automobile Accident Victims in France

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Suppose that a wage earner is the victim of an automobile accident. Aside from the damages which he may receive from the person who caused the accident, the victim may expect to receive specific reparation for his medical expenses and for his loss of income caused by the accident. This reparation may come from many different sources; to these sources the present chapter is directed.

One section of the chapter will be devoted to each of the various regimes which may participate in compensating the victim; a final section will consider the extent to which the reparation sources may have recourse against the person responsible for the injury.

A. REPARATION BY SOCIAL SECURITY

In France the primary source of reparation for injury is Social Security [*la Sécurité Sociale*]. Every wage earner who becomes an accident victim is entitled under the law to receive reparation from the funds of Social Security, independently of any action or right of action against the tort-feasor, and regardless of the negligence of the victim himself except in cases of intentional wrong [*faute intentionnelle*].

What kinds and what amounts of benefits does the covered workman get from the Social Security funds? In order to answer this question, it is necessary to distinguish between "common law accidents" (that is, accidents having no connection with the

victim's employment), and "work injuries" [*accidents de droit commun and accidents de travail*].

1. *Common Law Accidents*

A common law accident is one which has no relationship to the injured person's employment. For example, a workman goes for a walk one Sunday morning, and in the course of it is struck by an automobile negligently driven by Mr. X. The Social Security system includes two types of benefits applicable to this situation—medical benefits [*prestations en nature*] and cash benefits [*prestations en espèces*].

a. *Medical benefits*

Medical benefits consist in the partial or total repayment of the expenses caused by the accident. These expenses consist essentially of the following:

Medical service charges of all kinds — that is, the fees of doctors, surgeons, and other attendants;

Pharmaceutical and laboratory expenses;

Hospital bills in private or public institutions;

Costs of rehabilitation and prostheses.

All these types of benefits are subject to certain general rules, as follows:

(1) *The principle of direct payment by the injury victim.*

In general, doctors, surgeons, medical attendants, and pharmacists are paid directly by the covered injury victim [*l'assuré accidenté*], and not by the Social Security funds. The injury victim is supposed to pay all of the expenses in advance, and then to get reimbursed, on presentation of proof, for that portion of the expenses which is underwritten by Social Security. This rule is subject to certain exceptions and limitations. There is an exception to the principle of direct payment in cases when the medical services are rendered in public hospitals. In addition, if the injury victim is without resources, recourse may be had to local arrangements made be-

tween the Social Security offices and the pharmacists' associations [*les syndicats de Pharmaciens*] for the payment of pharmaceutical expenses directly by the Social Security fund. In such cases, the injury victim does not need to pay out anything; but these are exceptional.

With regard to hospital charges (as distinguished from charges for medical services rendered in hospitals), the principle of direct payment by the injured person has no application. If the injured person is cared for in a public hospital or in a private one which has made a standing agreement with the Social Security office, the Social Security office will pay its contribution directly to the hospital, and the injury victim need pay only the "adjustment tab" [*ticket modérateur*], which is the name given to that part of the expenses which is not covered by Social Security.

Prostheses are paid for directly by Social Security.

(2) *The principle of partial reimbursement.* In general, Social Security does not pay the whole of any proved expense. In order to discourage injured persons from making excessive demands on medical service, from buying excessive drugs, and from prolonging their hospitalization, French laws leave a part of the costs to be paid by the beneficiary. The injured person's proportional part is supposed to be about 20 percent, but very often it is more than this, and there are a few special cases in which the injured person does not have to contribute at all.

With respect to expenses for medical services, a regulation of May 12, 1960, introduced a requirement that the repayment of medical fees by Social Security offices should be made on the basis of rates fixed by agreements made between the regional offices of Social Security and the principal medical associations. The rates fixed by these agreements are supposed to be applied by all doctors who have signed the agreement and the repayment by Social Security is supposed to cover 80 percent, leaving 20 percent to be paid by the injured person.

In practice, the amount remaining to be paid by the beneficiary

is frequently much more than 20 percent because many doctors have refused to sign the agreement, and charge fees well over the ones fixed in the Social Security schedule, on the basis of which the Social Security office pays.

There is another exception in that in some very specific categories of cases, 100 percent reimbursement of medical expenses is made. This may happen, for example, when the treatment is particularly expensive, with particularly important surgery, or when the period of hospitalization is more than one month, in which case the 100 percent reimbursement begins with the second month.

With respect to pharmaceutical expenses, the rate of reimbursement varies according to the kinds of drugs. For instance, patients receive 90 percent reimbursement for trademark drugs [*spécialités pharmaceutiques*] which have no therapeutic equivalent (for example, certain antibiotics). There is a limited list of these drugs. But patients are reimbursed at only 70 percent for trademark drugs which have a therapeutic equivalent, and at 80 percent for all other drugs, and for analyses, laboratory tests, and dressings.

Expenses of optical, orthopedic, and minor prosthetic devices are reimbursed at the rate of 80 percent.

These types of benefits in kind are given not only to accident victims who are personally covered by Social Security, but also to accident victims in the families of covered persons. Members of the family include, of course, the husband or wife of the covered person, except that medical benefits in kind are not given to spouses who are members of licensed trades or liberal professions, or who are registered traders, or who are themselves covered by Social Security. The family also includes children under 16 years who are dependent on the covered person or his spouse, and who are not wage earners. In addition to these, the coverage extends to children over 16 but under 17 who are apprentices, and to children over 16 and under 20 who are students, or who

are physically disabled from becoming wage earners. Members of the family may also include ancestors, grandchildren, and cousins who live under the same roof as the covered person and who are a part of the household.

b. *Cash benefits*

(1) *When payable.* Cash benefits are payable when there has been an interruption of work by reason of an accident, and are designed to replace the lost wages. They are measured by disability days, starting with the fourth day of disability, without excluding weekends and holidays. Cash benefits for lost wages are paid only to covered persons, and not to members of their families.

(2) *Amount.* The per diem cash benefit [*prestation journalière*] is equal to half of the basic daily wage, which is defined as the actual wage, excluding expense allowances and family allowances, not to exceed one-sixtieth of the monthly maximum wage on which Social Security taxes are based.

This is the basic per diem, and is awarded when the covered person has at least two dependent children. This benefit may be increased or decreased by reason of family responsibilities, or because of hospitalization or nonhospitalization. For instance, it rises to two-thirds of the daily wage for nonhospitalized workers who have at least three dependent children, but only after the thirtieth day of disability, and in no case rises above one forty-fifth of the monthly taxable wage. On the other hand, the per diem is reduced if the worker is hospitalized, and has less than two dependent children or ancestors to be fed at home. The reduction is one-fifth with one such dependent, and two-fifths if the worker has no dependents but his wife.

(3) *Duration.* Unlike the benefits in kind, which are unlimited, cash benefits continue during the period of disability for a maximum of three years. After that, they are converted into pensions. If the disability amounts to two-thirds or more of the

covered person's capacity, the Social Security fund will pay a disability pension varying from 30 to 40 percent of the mean annual salary. This pension is always subject to revision and can be suspended or terminated for medical or administrative reasons. At the age of 60, it is replaced by an old age pension.

2. *Work Accidents*

Compensation for work accidents is basically similar to compensation for common law accidents, and comprises both medical benefits and cash benefits; but the benefits for work accidents are generally more favorable.

a. *Medical benefits for work accidents*

In general, medical benefits for work accidents cover medical, pharmaceutical, and hospital expenses, and in addition expenses of change of residence. The legislation is more favorable to victims of work accidents than of "common law" accidents, especially in the greater flexibility of the provisions.

(1) *The principle of direct payment by Social Security.* The covered victim of a work accident does not need to make initial payments for medical services. The fees of druggists and doctors are paid directly by the Social Security office. The same applies to hospital expenses.

(2) *The principle of full reimbursement.* The reimbursement covers all expenses resulting from the accident. In theory, the accident victim pays no part of the expense, unlike the situation in common law accidents.

b. *Cash benefits*

Cash benefits vary according to whether they are for temporary or permanent disabilities.

(1) *Temporary disabilities.* Here again the legislative provisions are more favorable than for common law accidents. A per diem benefit equal to half the wage is paid during the first 28 days; starting with the 29th day it is increased to two-thirds of

the basic wage, and is paid until the disability is terminated or stabilized (that is, when the victim is no longer foreseeably likely to progress further, either in the amelioration or aggravation of his disability). The cash benefit begins on the first working day following the accident (compared with the fourth day after a common law accident). The rate of the benefit is based on the wage earned during the period immediately preceding the injury, and is calculated on the gross salary, including the fringe benefits. The actual earnings will however be excluded from consideration if the daily wage as so calculated exceeds one percent of the annual wage on which the Social Security taxes are based. The daily wage is calculated by dividing the gross actual wage by the number of working days in the period taken as a base. If the work accident victim is hospitalized in the course of his disability, his cash benefits (unlike those of certain common law accident victims) continue unabated.

(2) *Permanent disabilities.* After the degree of disability is stabilized, and until the subject dies or is completely cured, a fixed disability pension is paid. The amount of the pension depends upon the extent of the disability and the amount of the actual salary received by the covered worker during the year preceding the accident. These pensions are adjusted annually by certain mathematical coefficients to keep up with changes in the cost of living.

B. SUPPLEMENTARY REPARATION REGIMES

The previous section has shown that Social Security gives less than complete reparation for the loss sustained by an accident victim. Some of the medical expenses remain to be borne by the victim himself, except in work accidents, and the cash benefits for temporary disability equal only a part of the wage loss regardless of whether the accident was of "common law" or "work" origin. Besides this, Social Security rules are very rigid, and do not adjust

themselves to the needs of particular cases with the flexibility or the rapidity which might be desired.

For these reasons, numerous systems have been developed to supplement the benefits allowed to accident victims by Social Security. There are a great many different institutions which contribute to these supplementary benefits, and many different schemes are in use. The following discussion will refer to the most frequently encountered, which are: (1) mutual benefit societies [*sociétés mutualistes*], and (2) health and welfare funds [*institutions de prévoyance et de sécurité sociale*].

1. *Mutual Benefit Societies*

Mutual benefit societies are organizations formed to provide the members with benefits which are supplementary to those of Social Security, in consideration of premiums paid by the members. They award both medical and cash benefits.

The *medical benefits* cover the repayment of all or part of expenses incurred for physicians, drugs, surgeons, dentists, hospital charges, prostheses, and X rays. These benefits compensate, at least partially, for the costs which Social Security leaves to be borne by the injury victim. The mutual benefit societies are social and familial in character, their benefits in kind being available to members of the family (the spouse and dependent children).

The *cash benefits* consist in payment of per diem allowances which complement the benefits of Social Security. These are allowed only to the heads of families.

Mutual benefit societies are frequently joined not only by wage earners covered by Social Security but also by non-wage earners. Their benefits extend not only to illness and maternity, but also to old age, infirmity, and death.

2. *Health and Welfare Funds*

Health and welfare funds are organized for the purpose of providing wage earners with benefits additional to those received

under Social Security, in consideration of premiums paid by them. The benefits awarded are lump sums [*capitiaux*], disability pensions or annuities by reason of work accidents, and pensions for widows and orphans.

These funds are based on the individual's trade or employment, in that they consist of employees of one or more business enterprises and the benefits are conferred by virtue of labor contracts, individual or collective. They are created as an incident to labor contracts made between unions and employers. They are strictly limited to wage earners, and they do not cover illness, which is considered the special preserve of the mutual benefit societies (*supra*), or of private insurance (*infra*).

C. REPARATION BY EMPLOYERS

In many enterprises employers furnish their employees with certain benefits supplementary to those of Social Security, without regard to whether the injury results from a "common law accident" or a "work accident." The benefits are secured by employment contracts, generally collectively bargained.

The principal benefit conferred by these agreements is in practice the payment of the wage which would otherwise have been suspended as the result of an injury or illness. The payment continues for a time and at a percent which vary according to the terms of the particular contract. It is possible for the collective agreement to provide for payment of the full amount during several months. In such cases, in order to avoid a cumulation of the "sick pay" with the Social Security cash benefits, which would improperly enrich the injury victim, the employer is entitled to collect from the Social Security office the amount of the cash benefit to which the worker would otherwise be entitled. Alternatively, he may arrange to have the wage earner repay him the cash benefits received from Social Security. For instance, the national collective bargaining agreement of engineers and construction supervisors made in France on July 23, 1956, provides for full

payment of wages during 30 days after the cessation of work, subject to repayment by the beneficiary of the amounts which he receives from Social Security.

A few collective bargaining agreements use a different formula, whereby the worker can retain his per diem from the employer without giving up his benefits from Social Security.

The duration of benefits varies according to the terms of the agreement. For instance, the Renault Agreement of September 1955 gives the accident victim for a period of two months a daily benefit which is added to that of Social Security. A worker must have been employed for six months prior to the accident in order to be entitled to this benefit.

A third type of arrangement made in collective wage agreements provides simply for the continuance of benefits in kind during a suspension of work. Where this exists, the Social Security office will pay the employer for the value of the benefits conferred instead of paying the worker. The type of benefit most commonly involved is lodging in which the workman is kept during his period of temporary disability.

D. REPARATION UNDER PRIVATE INSURANCE

Insurance against bodily injuries is written in order to make good the pecuniary loss suffered by the insured through a bodily injury of any nature, either in the course of his employment or in any other circumstances. In consideration of a premium or an assessment paid by the insured, the insurer agrees to pay reparation in the form of a lump sum or a pension in the event of a described type of accident. There are many different types of insurance policies, and they vary widely in regard to the benefits which they afford. The following discussion will deal first with the principal types of policy which are being written and then with the extent of the benefits accorded.

1. *Types of Policy*

One type of policy provides for the repayment of medical,

surgical, pharmaceutical, and hospital expenses. Others provide for the payment of a lump sum or pension in case of permanent disability, total or partial. Most of the latter type require that the degree of disability be very high. For instance, some apply to the loss of both eyes, one eye, one or more limbs, or one eye and one limb accompanied by permanent total disability.

A few policies provide for per diem cash benefits in case of temporary disability.

2. *Extent of Benefits*

The extent of benefits depends on the clauses in the policy. Some provide an arbitrary benefit [*remboursement forfaitaire*] which is entirely independent of whatever may be received from Social Security, such as x francs a day, during the duration of the disability. Others provide for a benefit which will make up the difference between that from Social Security and the total wage lost.

E. SUBROGATION TO TORT CLAIMS

Frequently when a person is injured as the result of either a common law accident or a work accident, the conditions are such that the person who caused the injury is personally liable for the results of it. The arbitrary benefits awarded to the injury victim by Social Security or by other insurance organizations does not in any way reduce the civil liability of the author of the harm. He remains liable to bear the entire burden of reparation insofar as he is responsible for the accident. For this reason, the courts must in the first instance fix the amount for which the tort-feasor is liable, according to the common law of liability, since this fixes the limit of the tort-feasor's obligation.

However, the injury victim is not entitled to receive from the tort-feasor more than the difference between what he has received from Social Security and the amount for which the tort-feasor is liable. The Social Security organizations have the right

to be paid by the tort-feasor within the limitation of his total liability according to common law, and the further limitation of what they themselves have paid out. In order to enforce this right, they have a cause of action against the tort-feasor to obtain repayment of the various benefits conferred on the injury victim.

The exercise of this right of subrogation has created a great number of problems in French law. However, the repayment by the tort-feasor (or his liability insurer) of ordinary benefits such as expenses for medical services and pharmaceuticals, and of per diem benefits, is made without difficulty and raises no problems. The Social Security offices generally obtain satisfaction.

On the other hand numerous difficulties have arisen with respect to payment of pensions and annuities by "Social Security organizations." According to the prevailing case law, the Social Security funds are entitled to claim against the tort-feasor only for the past installments of the annuity or pension, but not for the capital amount of the annuity or pension, since they have no obligation to pay the amount of this capital, but only the periodic amounts.

When the Social Security organizations have obtained repayment, the other insurance organizations who have paid benefits to the injury victim are entitled to claim repayment of the amounts they have paid, sharing equally among themselves. In such cases, it is prudent for the liability insurer to have a receiver [*sequestre*] appointed into whose hands the amount due can validly be paid. The distribution of this sum will then be made by the receiver among the various claimant organizations in proportion to their payments, to the extent that the Social Security payments have not already exhausted the fund.

F. CONCLUSION

These are, briefly stated, the various sources of reparation available to the victim of an automobile injury in France. It will appear that when the victim is a person covered by Social Security,

his first and foremost reliance will be the benefits of Social Security. To these benefits may be added the supplements from other insurance organizations, but the latter are not always available. It further appears that it is difficult to say, with certainty and precision, whether an accident victim will suffer a substantial eventual economic loss, or whether on the contrary the benefits which he will receive will substantially equalize his losses. The result will depend principally on two elements: (1) the extent to which the injury victim carries private insurance, outside of his Social Security coverage; (2) the degree of severity of the accident, since it is quite certain that if the victim suffers a high degree of disability or of impairment of appearance, the loss will be difficult to repair, and is for this reason likely to result in a substantial permanent impairment of economic condition.

EDITORIAL NOTE: TORT LIABILITY FOR AUTOMOBILE
ACCIDENTS IN FRANCE

The preceding article by Dr. Durin does not set forth the principles of tort liability for automobile accidents, which were authoritatively explained for American readers by Professor Paul Esmein of the University of Paris in his article entitled "Liability in French Law for Damages Caused by Motor Vehicle Accidents," *Am. Journ. Comp. Law*, vol. 2, p. 156 (1953). See also Suzanne Tunc, "Establishment of a 'Fonds de Garantie' to Compensate Victims of Motor Vehicle Accidents," *Am. Journ. Comp. Law*, vol. 2, p. 232 (1953). Briefly, tort liability for automobile accidents under the Civil Code rests on three bases: (1) the operator is liable for negligence; (2) the operator's employer is vicariously liable for negligence; (3) the custodian of the vehicle (normally the owner) is presumed liable for negligence of the operator or for a defect in the vehicle; the presumption can be rebutted only by disproving both possibilities.

CHAPTER 14

Reparation for Traffic Injuries in West Germany

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In 1962 there were more than one million traffic accidents in the Federal Republic of Germany (population: 54 million; number of automobiles: 9.5 million). Somewhat less than one-third of these accidents (308,140) caused personal injuries, and 14,088 persons were killed.¹ According to some experts, West Germany's total expenses for traffic accidents, including proportionate expenses for police and the courts, amount to 4 - 5 billion marks (\$1 billion - \$1.25 billion) per year, compared to a federal budget of approximately 60 billion marks (\$15 billion).²

These figures illustrate the economic importance of traffic injuries within the framework of the highly industrialized and prosperous West German society. How does the West German legal system respond to the challenge indicated by the figures mentioned?

A. TORT LIABILITY

1. *Absolute Liability*

The Road Traffic Law of 1952 (*Strassenverkehrsgesetz*),³ first enacted in 1909 under the title of Motor Vehicle Law (*Gesetz*

¹ Statistisches Jahrbuch für die Bundesrepublik Deutschland 1963, 373 ff.

² See Ernst Meyer, address reported in *Zentralblatt für Verkehrsmedizin, Verkehrspsychologie und angrenzende Gebiete*, Vol. 6 (1960) p. 191; Paul Berkenkopf, address reported by H. Wiethaup in *Der Krankenhausarzt. Fachzeitschrift für das Krankenhauswesen*, Vol. 33 (1960) p. 90.

³ B. G. Bl. 1952. I. 832.

über den Verkehr mit Kraftfahrzeugen),⁴ provides for strict liability in any case in which through the operation of a motor vehicle a person is killed or injured or a thing is damaged. The person made liable is the "holder" (*Halter*) of the vehicle, which means the person entitled to possession of it. Normally this is the owner, but in the case of a leased vehicle it may be the lessee.⁵

However, the holder is not liable if the accident is due to an "unavoidable event," as defined by Section 7(2) of the act, or if the vehicle was used without the knowledge or the will of the holder. Likewise, the act does not apply to injuries caused by automobiles that cannot drive faster than 20 kilometers per hour, nor to injuries of vehicle operators, nor to liabilities of "holders" to passengers unless the transportation was for consideration and in the course of the holder's business.⁶ Furthermore, the liability imposed on the holder is limited in several regards. Only certain kinds of damages can be claimed: the costs of medical treatment, funeral expenses, lost income, and other expenses caused by the accident. Dependents of injured persons are not entitled to damages unless the injury was fatal.⁷ In contrast to the general German law of torts, the Road Traffic Law awards no compensation for pain and suffering or for the loss of services to which a third person might be entitled. In addition to these restrictions, the Road Traffic Law provides for maximum amounts of damages recoverable;⁸ these are:

- (i) In case of death or injury to a single person a capital amount of 50,000 marks (\$12,500) or an annuity of 3,000 marks (\$750).
- (ii) In case of death or injury to several persons caused by one and the same event, notwithstanding the limits specified

⁴ R. G. B1. 1909. 437.

⁵ See Von Mehren, *The Civil Law System* (Englewood Cliffs, N. J.: Prentice-Hall, 1957), p. 436.

⁶ Road Traffic Law, sections 8 and 8a, as amended by B. G. B1. 1957. I. 710.

⁷ *Id.* §§ 10 and 11.

⁸ *Id.* § 12.

above, a capital amount totaling 150,000 marks (\$37,500) or annuities totaling 9000 marks (\$2250).

- (iii) In case of damage to property, even if several things are damaged by the same event, 10,000 marks (\$2500).

Finally, the act provides for a two year period of limitations, whereas the normal period for tort claims is three years.⁹

Unlike the "holder" of an automobile, the driver is not, theoretically, under strict liability; he can escape responsibility if he can prove he was free of negligence.¹⁰ In practice, this divergence does not carry much weight. Since German courts (like the courts in many other countries) have imposed extremely stringent duties of care on the driver of a motor vehicle, the defendant is in an almost hopeless position when he endeavors to show that he complied with every single one of these duties. Consequently, in the overwhelming majority of cases the driver, as well as the holder, is liable for the consequences of a traffic accident. In substance his liability is limited by the very same provisions which have been sketched above.¹¹

2. *General Law of Torts*

By virtue of Section 16, the Road Traffic Law leaves undisturbed federal laws which authorize more extensive damages. The victim of a traffic accident may therefore invoke the general law of torts embodied in the German Civil Code of 1900. The pertinent provisions of the Code (Sections 823-853) provide for an elaborate system of liability to which limitations comparable to those of the Road Traffic Law are unknown.

The most significant advantage of suing under ordinary tort law is that it allows the injured party to recover damages for pain and suffering.¹² Yet it must be borne in mind that the amounts

⁹ Compare *id.* § 14 with German Civil Code, § 852.

¹⁰ Road Traffic Law, *supra* note 6, § 18.

¹¹ *Ibid.*

¹² German Civil Code, § 847.

assessed by German courts as damages for pain and suffering—always separated from damages for actual losses—are surprisingly low compared to American standards. The highest amount adjudicated since the end of World War II is 50,000 marks (\$12,500). In this case the plaintiff had suffered incredibly grievous injuries; the average damages for pain and suffering are substantially below the amount recovered in this instance.¹³

In addition to the possibility of obtaining damages for pain and suffering, the plaintiff invoking the Civil Code provisions on torts is entitled to full indemnification for all his actual losses including any reduction in earning capacity or loss of promotion (Section 842). Normally the detriment to the plaintiff's earning capacity is compensated in the form of annuities; only under special circumstances ("for good cause") may the plaintiff demand a lump sum.¹⁴

The tort law of the German Civil Code is, however, dominated by the fault principle. Hence, the plaintiff who wants to base his action on these tort rules has to show that the defendant caused the accident through negligent conduct. To be sure, this burden of proof is considerably alleviated by the previously mentioned case law which has established far-reaching duties of care with respect to driving motor vehicles and similar activities. Still, the plaintiff claiming unlimited damages under the provisions of the Civil Code is in a less favorable position than the one who confines himself to an action under the Road Traffic Act.

One particular disadvantage of a tort action under the German Civil Code is the peculiar rule of Section 831 on vicarious liability. According to this provision an employer is not responsible for tortious acts of his employee if he can prove that he has exercised ordinary care in the latter's selection and superintendence. Although the courts have constantly intensified the requirements of

¹³ See the detailed list of more than 600 cases in Lieberwirth, *Das Schmerzensgeld* (2d ed., 1961), 145 ff.

¹⁴ German Civil Code, § 843(3).

evidence to be met by the employer, there are still numerous cases in which the necessary evidence can be supplied. This is particularly true of traffic injury cases. If an employer who is likewise the "holder" of a motor vehicle succeeds in establishing that he has complied with his duties under Section 831 of the Civil Code, he is liable only within the scope of the Road Traffic Law, even where his employee has caused injuries by negligently driving the employer's automobile. If the plaintiff has sustained losses in excess of the limits of the Road Traffic Law, the excess can be recovered only in an action against the driver. But the consequence is less important than it may appear because, as will be pointed out below, the driver's liability as well as the holder's is normally covered by compulsory insurance.

3. *Comparative Negligence*

If the victim of a traffic accident himself acted negligently and thus contributed to the accident, or to the harm resulting from it, this will mitigate the defendant's liability regardless of whether the action is based on the Road Traffic Act or on the Civil Code.¹⁵ Very rarely do German courts dismiss an action on account of contributory negligence; their usual reaction is to reduce proportionately the damages awarded.

B. COMPULSORY LIABILITY INSURANCE

Before 1939 there was no nationwide statute establishing an obligation to take out insurance against the risks attributable to road traffic. If the holder and driver were both uninsured and financially unable to satisfy the victim's claims, the victim of a traffic accident would not succeed in collecting compensation, regardless of which one was liable. In order to avoid public burdens which might result from such instances, the Compulsory Insurance Law (*Pflichtversicherungsgesetz*) was enacted in 1939. Under this act the holder of any motor vehicle usually garaged in

¹⁵ Road Traffic Law, *supra* note 6, § 9; German Code, § 254.

Germany is obliged to take out liability insurance for himself and the authorized driver. At the same time, all insurance companies authorized to do business in Germany are under an obligation to write such insurance, unless extraordinary reasons set forth in an executive order supplementing the act justify the rejection of an offer. This ordinance also provides for minimum amounts of coverage below which the insurance taken out will be considered insufficient; at present these amounts range from 100,000 to 150,000 marks (\$25,000 to \$37,500) for personal injuries, varying with the type of vehicle in question.

Despite the explicit intention of the statute to protect the victims of traffic accidents more effectively, it does not give the injured party a direct action against the insurer. The victim or, in case of death, his next of kin can only sue the person responsible for the accident, but not the insurer. A judgment obtained against the tort-feasor is not immediately effective against the insurance company. But in all probability, the company will satisfy the judgment. If it does not, the injured party is entitled to garnishment of the defendant's rights under the insurance policy; after garnishment, the injured party may directly sue the insurer.

The duty to take out insurance is enforced not only by the threat of criminal penalties, but also by a rather simple administrative device. Everyone applying for an automobile license plate has to show that liability insurance for the holder and the authorized driver of the vehicle has been taken out, as required by the Compulsory Insurance Law. Hence, it is very unlikely that an accident will be caused by an automobile which has never been insured. However, the insurance once written may lapse because the insured ceases to pay the premiums. In this case the insurer is obliged to inform the competent agency, which will immediately withdraw the license plate. Should an accident have happened meanwhile or within one month after the insurer has notified the agency, German law furnishes a peculiar safeguard in the interest of the victim. Although the tort-feasor's

liability is actually not covered by the insurance, the company is excluded from setting up this defense against the injured party. It has to comply with the contractual conditions as if the contract were still effective; afterwards it may recover against the insured.¹⁶ Thus, the risk of the wrongdoer's insolvency is shifted to the insurance company.

C. SICK-LEAVE PAY

If a white-collar worker is incapable of working for reasons for which he cannot be deemed responsible, he is entitled to a continuance of his full salary as long as his incapacity does not last more than a "relatively short period." In case of sickness, regardless of whether it is due to an accident or not, the employee has the right to continued payment of salary by the employer for six weeks. A contractual clause excluding or limiting this right is null and void.¹⁷ Collective agreements sometimes provide for a more extended continuance of salary.

Departing from earlier cases, the German Supreme Court has recently held that the sums thus received by the injured person are not to be taken into account in assessing damages against a person liable for the accident. On the other hand, the employer may demand that the portion of his employee's damage claim which corresponds to the employer's payment be assigned to the employer.¹⁸

Civil servants are entitled to a continuance of salary during illness without any time limitation. But if a civil servant's incapacity amounts to a permanent disability, sick-leave pay will cease and be replaced by a pension. If the civil servant has a right of action for damages against a third person for causing the

¹⁶ Law on the Insurance Contract (Gesetz über den Versicherungsvertrag, R. G. Bl. 1908. 263), § 158c, as amended by the Compulsory Insurance Statute, R. G. Bl. 1939. I. 2223.

¹⁷ German Civil Code, § 616(2).

¹⁸ Bundesgerichtshof (June 19, 1952) 7 B.G.H.Z. 30; (June 22, 1956) 21 B.G.H.Z. 112.

disability, the state, or municipality has a right of subrogation with respect to the sick-leave salary which has been paid.¹⁹

Employees who belong neither to the white-collar group nor to the civil servant group are not entitled to a continuance of their full wages in case of incapacity. Until 1957 these manual workers got nothing but their social security benefits. Since then their situation has been gradually improved. At present they are entitled to a payment supplementing their social security benefits in such a way that they receive 90 percent of their wages for a period of six weeks. But reform programs are under way aiming at a complete assimilation of the manual workers' legal position to that of white-collar workers, as far as sick-leave pay is concerned.

D. INDUSTRIAL ACCIDENT INSURANCE²⁰

In Germany this type of Social Insurance was established as early as 1884. Originally serving as a means to protect workmen in some specified industries particularly exposed to the risk of accidents in the course of employment, it was later extended to several other industrial and nonindustrial types of enterprises. Today it covers all employees and even some categories of self-employed persons. Apart from accidents, a number of occupational diseases listed in an executive order are included.

This type of insurance is extremely important in relation to traffic accidents because accidents on the way to and from work are covered. During recent years there has been an annual average of 15,000 personal injuries arising from accidents of this type.

The benefits granted under the industrial accident insurance

¹⁹ Federal Civil Servant Statute (Bundesbeamtengesetz), section 87a, B. G. B1. 1953. I. 551, as amended by B. G. B1. 1957. I. 667 and B. G. B1. 1961. I. 1802.

²⁰ For details and references to the pertinent provisions, see Bernstein, *Schadensausgleich bei Arbeitsunfällen* (Karlsruhe, 1963) 42 ff.

scheme are of various types. Medical treatment of all kinds as well as occupational therapy and rehabilitation are afforded in addition to pecuniary benefits. In case of temporary disability, the employee normally receives cash benefits to the same extent as if his disability were not due to an accident but constituted an ordinary illness. These benefits range from 65 to 75 percent of the employee's salary, depending on the number of family members that he has to support. They are granted for a maximum of 78 weeks within a period of three years. As long as an employee gets the previously mentioned sick-leave pay from his employer (in the case of a white-collar worker, the first six weeks) he is not entitled to illness benefits. The payments to manual workers granted since 1957 are excluded from this rule because they are just a supplement to, not a substitute for, sickness benefits.

In case of permanent disability, German social accident insurance law accords a pension to the insured if the degree of disablement is at least 20 percent. The amount of the pension varies according to the degree of disability with a maximum of two-thirds of the disabled person's last annual wages in the case of total disability. The "degree of disability" is not necessarily identical with the actual reduction of income in the particular case; rather, it is the detriment to earning capacity typically flowing from a given type of injury, regardless of whether this typical consequence has materialized in the instant case.

If on the way to or from his work a person is killed in a traffic accident, a death grant in the amount of $1/15$ of the deceased person's last annual wages, but at least 400 marks (\$100), is accorded to his dependents. In addition to this, the widow is entitled to a pension in the amount of $3/10$ of the last annual wage, and if she is more than 45 years old or has a child under 18, or if she is unable to work, in the amount of $2/5$ of the last annual wage of the breadwinner. A widower has the right to a pension only if the deceased wife's earnings were the family's main re-

source. An orphan not older than 18 years receives a pension of $1/5$ of the deceased parent's annual wages if one parent is still alive, and of $3/10$ if both parents are dead. In certain circumstances even parents or grandparents of an accident victim are granted a survivor's pension. If the total amount of all pensions exceeds $4/5$ of the insured person's last annual wages, each of them is reduced partially.

All benefits granted under the industrial accident insurance scheme are independent of negligence on the part of the insured person and of those who are entitled to benefits in case of his death. If, however, the person claiming a benefit has caused the accident intentionally, he is deprived of his right. This rule applies to the insured himself with the qualification that only conduct motivated by the desire for benefits, in contrast to merely intentional conduct, will result in defeating his rights.

A person who is liable for an accident on the basis of the law of torts cannot mitigate damages by reason of the benefits accruing to the injured party or his dependents under the industrial accident insurance scheme, but the organizations which pay the benefits are entitled to subrogation. Moreover, the liability of the employer and of a fellow-employee toward the insured and his next of kin is normally restricted to intentional misconduct. Where this rule applies, the injured party in most cases cannot recover anything in excess of the indemnification granted under the insurance scheme. Ordinary road accidents are, however, excluded from the rule mentioned. Employers and fellow-employees, like all other persons, are liable according to the general rules of tort law or according to the Road Traffic Statute.

The organizations charged with the administration of the industrial accident insurance scheme are Employers' Mutual Insurance Institutes financed by employers' contributions ranging from 1 to 2 percent of wages (with the exception of the mining industry where they are more than 10 percent).

E. OTHER FORMS OF SOCIAL SECURITY

1. *Health Insurance*

All manual workers and also white-collar workers with an annual salary of not more than 7920 marks (\$1980) are covered by social security health insurance. This insurance is supplied by local, regional or enterprise funds, and financed by contributions of employers and employees, each paying 50 percent.

The cash benefits granted in case of sickness have already been discussed in connection with accident insurance. In addition to them, the insured as well as his spouse and his children are entitled to free medical treatment without time limitation. If the insured has to stay in a hospital, the cash benefits are reduced to 25 percent of the normal amount for a person without dependents, and to 66 2/3 percent for a person with one or more dependents to support, with 10 percent added for every further dependent up to a maximum of 100 percent.

If an insured dies, his family is entitled to a death grant in the amount of the deceased person's wages for 20 days with a minimum of 100 marks (\$25).

Presently, about one half of West Germany's population is insured under the health insurance scheme. Considering that spouses and children of the insured are also entitled to medical treatment, the coverage is estimated at about 85 percent of the entire population.²¹ From this it follows that in most cases of traffic accidents the immediate needs for medical treatment are met by this type of social security. In the great majority of cases the loss of income is also partly covered by its benefits. The remaining part will usually be left uncompensated as long as there is no tort action available to the injured party, since most people covered by social health insurance do not take out additional private accident or health insurance. People not under the health

²¹ Übersicht über die soziale Sicherung in der Bundesrepublik Deutschland. 4th ed., p. 18, 1962, Bonn: Bundesministerium für Arbeit und Sozialordnung.

insurance scheme have, of course, to pay their doctor and hospital bills themselves. But since they belong predominantly to higher income groups, they can usually afford this; besides, most of them are privately insured.

2. *Pensions*

All manual workers are insured under the pension insurance scheme, but white-collar workers are covered only if they do not earn more than 15,000 marks (\$3750) per year. Employers and employees contribute equally (each 7 percent of wages) to the pension insurance funds, which are organized as State Insurance Institutes for manual workers, and as a Federal Insurance Institute for salaried employees. Even various groups of self-employed persons, especially farmers, are compulsorily insured under a pension insurance scheme.

The system of benefits is highly complicated and its intricacies cannot possibly be pointed out here. Suffice it to observe that since a radical reform in 1957 the pensions granted have been annually raised and are on the whole rather adequate to present standards of living. It is also noteworthy that under the pension insurance schemes an insured person who has lost his employability before reaching 65 years of age is entitled to rehabilitation (vocational therapy, etc.) rather than to a pension, insofar as there is any chance of rehabilitation.

3. *Subrogation*

The organizations administering health and pension insurance schemes are entitled to subrogation to the same extent as are the Employers' Mutual Insurance Institutes which are charged with carrying out the accident insurance scheme. It follows that the benefits granted under the various schemes of social security do not alleviate the responsibility of tort-feasors. Indeed, the amount of damages may even be increased by the fact that an injured person is entitled to social security. This stems from a provision

in the Social Security Code empowering the social security organizations to claim damages on the basis of generalized values. Thus if an injured person has to go to a doctor, his social security organization may claim a certain sum specified in the Code even though the actual costs were below this amount. In the reverse situation, where the actual costs are higher than the generalized standards, the organization may claim them.

An injured person not covered by a social security scheme can, according to German law, never recover more than the actual expenses he has incurred except for compensation for pain and suffering. Although this results in a hardly justifiable discrimination against certain groups of tort-feasors and their liability insurers, the courts have upheld the provisions in favor of social security so long as the amount claimed does not differ substantially from the actual costs recoverable under ordinary tort rules.²² A difference of 50 percent has been held substantial, whereas 25 percent was considered irrelevant.

Where claims to which a social security organization is subrogated are covered by liability insurance, most cases are settled according to certain agreements between the insurance companies and those organizations. Comparable to a knock-for-knock agreement between two or more insurance companies, these agreements not only avoid litigation about the factual details of the case, but frequently prevent investigation. Distribution of losses is governed by percentages, and based on a rule of thumb.

F. ADDITIONAL SOURCES OF RELIEF

Due to the elaborate system of social security and its ample coverage, German private insurance other than liability insurance does not play a major part as a means of distributing losses originating from road accidents. Poor relief does not have any bearing worth mentioning.

²² Bundesgerichtshof (Jan. 27, 1954) 12 B.G.H.Z. 154.

1. *Damage to Property*

Where a third person's property is damaged through a car accident, compulsory liability insurance covers all claims for property damage. But damage to the driver's or the holder's own property, especially to the latter's car, is not included. The risk of damage to the vehicle can, however, be insured in the same policy. Only a minority of motorists takes out insurance with such comprehensive coverage, probably because premiums are rather high. In the absence of insurance cover, the owner of a damaged vehicle naturally has to pay the repair costs from his own pocket, if nobody else is liable. Under present economic circumstances this apparently does not give rise to great problems for many people. Even where another person can be held responsible, most car owners have their vehicles repaired long before they succeed in collecting from the other party or its insurance company. In fact, it would be unwise not to do so. Litigation may take quite a long time—usually one to three years—depending on whether appeal is taken from the first judgment or not. (All civil cases are tried without a jury and are open to appeal except where the amount involved on review does not exceed 50 marks—\$12.50.) Even a settlement without litigation will usually require some months.

Insofar as damage to property is covered by insurance a corresponding claim to damages is subject to subrogation in favor of the insurance company.

2. *Private Accident and Life Insurance*

A person who is not within the purview of social security is likely to be covered by an accident insurance and/or by a life insurance contract. Whatever the injured person or his dependents receive on the basis of such a contract is not to be taken into account in assessing damages against a third person. The underlying theory is that the accident victim is entitled to payment from the insurance company merely on account of the premiums

paid from his own pocket and that he certainly did not intend thereby to further the tort-feasor's interests.

Surprisingly enough, the German Supreme Court has held that the plaintiff's damages are not mitigated by the fact that he has received the proceeds of a private accident insurance policy taken out by the defendant to cover losses of his passengers.²³ The Court recognized that there might be exceptions to this rule (for example, where the defendant was obliged by contract to carry insurance for the plaintiff's benefit, or perhaps in certain family relationships) but held such exceptions inapplicable to the case at bar, in which the injured person was a joint venturer with the defendant in conducting an autobus excursion. The holding seems hardly reconcilable with the probable intention of the parties.

Since there is no right to subrogation on the part of an accident or life insurer, the injured person or his dependents may well recover twice when benefits under an accident or life insurance contract coincide with a claim for damages.

G. CONCLUSION

It should be clear from the foregoing survey that the most urgent needs of traffic victims are relatively well taken care of under German law. All those who would probably not be able to pay high doctor or hospital bills from their own pockets are entitled to medical care free of charge. No employed person will sustain any substantial loss of income during the first six weeks after the injury.

There is also a well-established system of rehabilitation for victims of traffic accidents occurring at work, or when going to or coming from work. Injured persons outside of this group are less well off with respect to rehabilitation.

Severe permanent disability is a difficult problem under German law as well as under other legal systems. Often the detriment to earning capacity is not completely compensated.

²³ Bundesgerichtshof (April 23, 1963) 16 N.J.W. 1201 (1963).

Moreover, pain and suffering which aggravate a severely disabled person's situation are left uncompensated by the various social security schemes.

Tort law furnishes an important additional device for reparation of traffic injuries. But to a great extent it is a matter of good luck whether the injured can avail himself of this device. In many cases it merely functions as a means of redistribution of losses incurred by the social security organizations.

APPENDIX A

Reliability of Sample Estimates

Nonsampling Errors

Estimates of amounts, proportions, or the strength of relationships are subject to measurement errors and to sampling variability. In the case of surveys the main source of measurement error is the inability or unwillingness of respondents to recall accurately such things as the amount of a hospital bill, or how long they were out of work. Some attempts were made (reported in Chapter 10) to assess the accuracy of reports on hospital bills by checking hospital records. In some serious cases, reports of the plaintiffs' lawyers, and of defendants and their lawyers, provide a check on some of the simpler facts. But in general, response error is difficult to estimate. A second source of measurement error results from nonresponse, the fact that it proves impossible to locate and secure information from each person in the original sample. The importance of nonresponse depends both on what proportion were not reached, and on the extent to which they are likely to differ in some systematic way from the others. In this study the major source of nonresponse was inability to locate the people (inadequate address), which is much less likely to be biasing than refusals by people after they know what the study is about.

Sampling Variability

The second major type of error results from the possibility that a sample may not be exactly like the parent population in every respect. Estimates based on samples tend to vary around the true population value, and for any single sample the difference of its estimates from population values are called sampling errors. Where samples are used, it is because the population values are

not known, but it is possible to estimate how likely it is that the sample estimates differ by some amount, or for the sake of uniformity, how far they may deviate from the truth at some fixed level of credibility.

In general, the larger the sample, the less the estimates based on it will vary from the true population values. (In two or more stage sampling, we must consider the sample size at each stage of sampling—not just the total sample size.) But larger samples are not only more costly, but more difficult to secure with high quality field procedures and high response rates. Hence, the systematic measurement errors may well increase with increased sample size.

For a given sample, the sampling error is not an estimate of the difference between the sample estimate and the truth, but a measure which can be used to construct the range, on either side of the sample estimate, which is likely (with a stated probability) to include the true value. A range of one standard error on either side of the sample estimate can be expected to include the population value in about 68 percent of the cases of samples of this type. With a range of two standard errors there is about one chance in twenty that the true value lies beyond this range on either side of the sample estimate.

In the case of simple random sampling, sampling errors of estimates depend mainly upon the size of the estimate and the number of cases upon which the estimate is based, not to any important degree upon the size of the population sampled. For instance, with simple random sampling used to estimate a percentage or proportion, the standard error of the estimated proportion is given by:

$$\sqrt{\frac{p(1-p)}{n-1} \left(1 - \frac{n}{N}\right)}$$

where p is the proportion being estimated, n is the number of cases in the sample and N is the number in the universe. Since for

most survey samples ($1 - \frac{n}{N}$) is approximately 1, the expression for the standard error becomes

$$\sqrt{\frac{p(1-p)}{n-1}}$$

For a fixed value of n , the closer the estimated percentage is to 50 percent, the larger the numerator, and the larger the sampling error—for proportions around .50 it is .2500, while for proportions around .05 or .95 it is .05x.95 or .0475.

More important, the larger the number of cases, the smaller the ratio, and the lower the sampling error. Allowing for the square root, this means that doubling the number of cases reduces the sampling error by only about 30 percent.

The following example may show more clearly how the formula works: Suppose a survey found 60 of a sample of 100 people favored some policy, say fluoridating the water. This can be interpreted as follows:

The standard error is

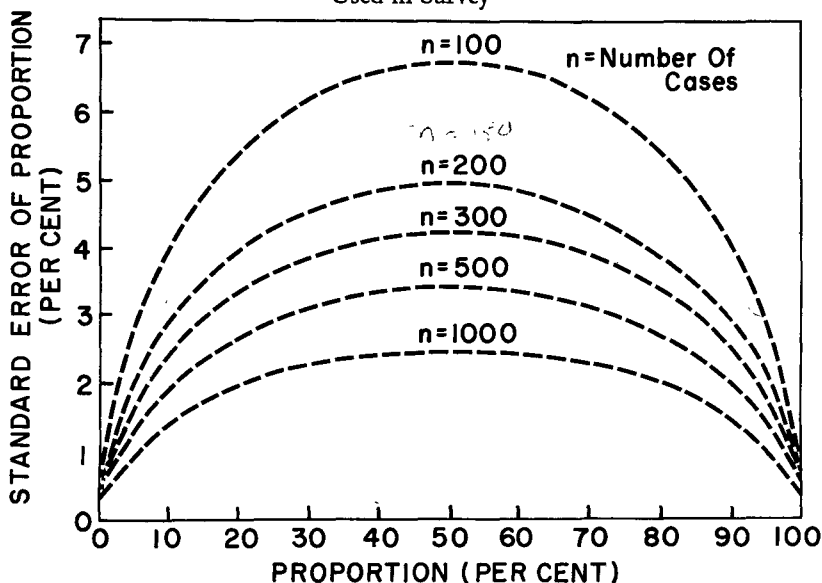
$$\sqrt{\frac{.60 \times .40}{100 - 1}} = \sqrt{\frac{.2400}{99}} = \sqrt{.0242} = .05 \text{ (nearly).}$$

Hence there is less than one chance in twenty that the true proportion is less than 50 percent or more than 70 percent, and many statisticians would write the result $.60 \pm .10$.

The present study, however, uses a more complex sample, as indeed almost all samples for surveys do. In the first place, geographic clustering is used to reduce field costs, by sampling counties and then sampling cases in those counties. This produces no bias, but increases the possible variability of estimates based on such samples. Hence, the charts presented below require greater margins to take account of this.

Second, the present study uses several different sampling fractions. Since the data are then properly weighted, no bias is produced, but again the sampling errors are affected. Where most of the variability is in a stratum which is oversampled, the

FIGURE A-1
Standard Errors of Proportions for Design
Used in Survey



sampling errors may actually be reduced.* Indeed, that was the purpose of the oversampling.

The variety of samples and of estimates being made from them in this study made it impractical to calculate sampling errors directly for each statistic.

Figure A-1 presents, then, a rough guide to the reliability of estimated proportions, as affected by the size of the proportion and the number of cases in the denominator. It and the following charts were not based on actual computations of the effects of the sample design on sampling errors, but a previous study using the same basic sample design provides some basis for these estimates.†

For example, in Chapter 6 it was shown that of 312 seriously

* See Leslie Kish, "Efficient Allocation of a Multi-Purpose Sample," *Econometrica* 29 (July, 1961) 363-85.

† See Grover Wirick, James Morgan, and Robin Barlow, "Population Survey," in *Hospital and Medical Economics*, Walter McNerney and others, Chicago: Hospital Research and Educational Trust, 1962, especially Appendix 1-K, pp. 327-36.

FIGURE A-2
Approximate Standard Errors of Differences between Proportions
of Mutually Exclusive Subgroups for Design Used in this Study

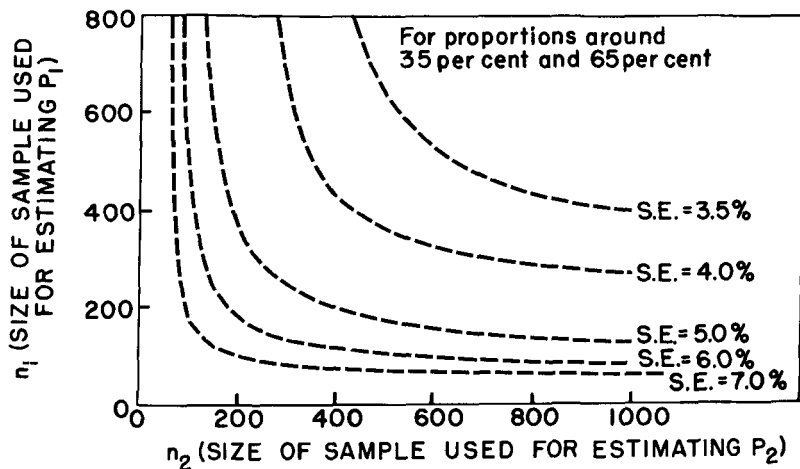
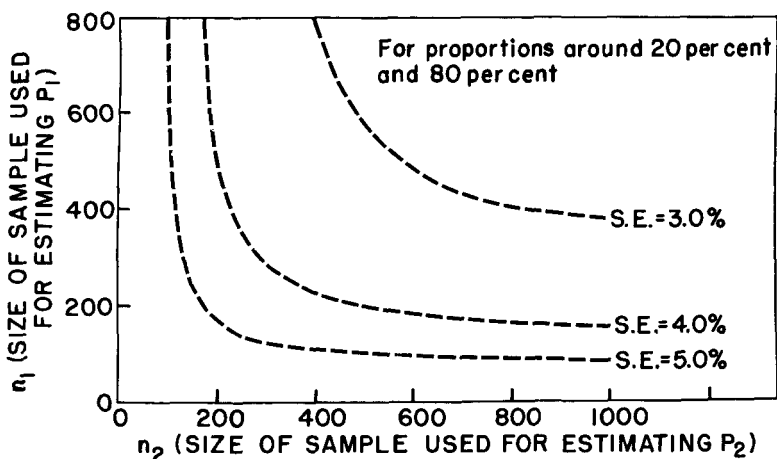
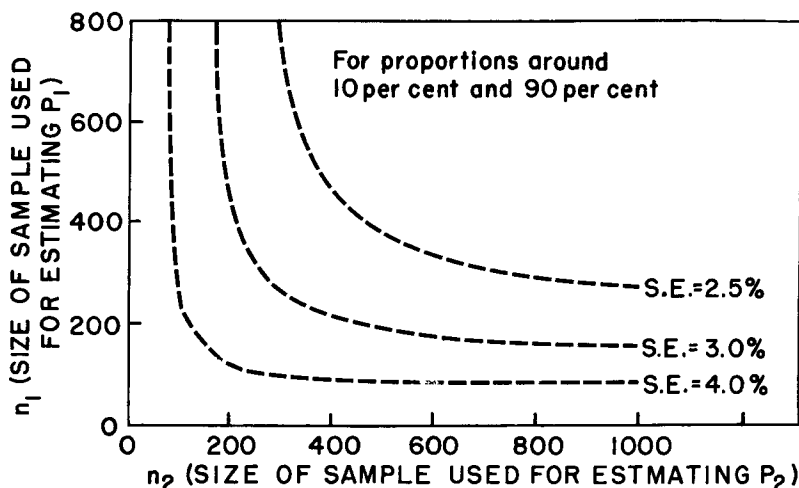


FIGURE A-3
Approximate Standard Errors of Differences between Proportions
of Mutually Exclusive Subgroups Used in this Study



injured individuals, 49 percent hired a lawyer. Chart 1 shows that for percentages around 50 and about 300 cases, the sampling

FIGURE A-4
Approximate Standard Errors of Differences between Proportions
of Mutually Exclusive Subgroups Used in this Study



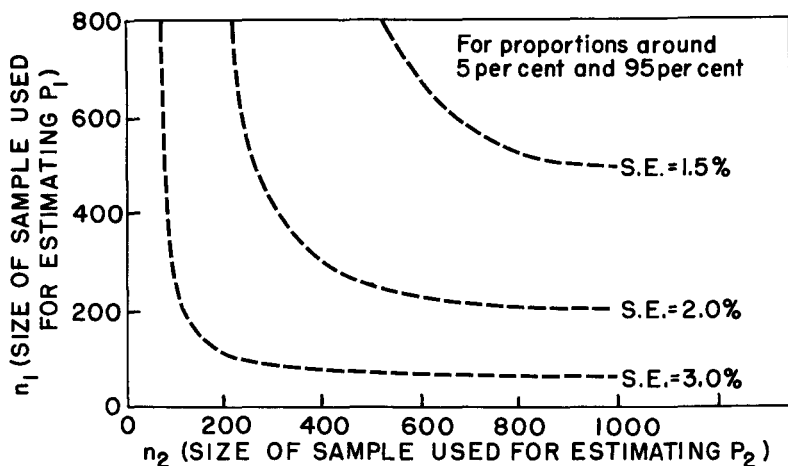
error is about 4 percent. Hence there is a very good chance (19 out of 20) that the true proportion is between 41 and 57 percent.

Many of the findings in the study, however, have to do with differences between two proportions, not merely the size of one of them. If the two proportions have mutually exclusive bases and are uncorrelated, the sampling error of their difference is greater than that of a single proportion. The reason is that each of the two is subject to sampling variability.* Where the two are based on similar numbers of cases, the sampling error of the difference is about 40% greater than the sampling error of either of the two proportions.

Figures A-2 to A-5 provide approximations to the sampling errors of differences in proportions derived from two *different* subgroups, as they depend on the sizes of the two groups and the level of the two proportions.

* The standard error $(P_1 - P_2) = \sqrt{\overline{SE}^2_{P_1} + \overline{SE}^2_{P_2} - 2p\overline{SE}_{P_1}\overline{SE}_{P_2}}$

FIGURE A-5
Approximate Standard Errors of Differences between Proportions
of Mutually Exclusive Subgroups Used in this Study



These charts are entered using the number of cases behind each of the two percentages being compared, and the contour lines indicate the difference between the two percentages that could arise by chance one time in three (standard errors). Since the standard errors again depend upon how close the two percentages are to 50, separate charts are used depending on the general range. These charts are appropriate for comparing proportions from *two different subgroups, not for comparing two proportions within the same subgroup*. They are adjusted for expected effects of geographic clustering of the sample and are somewhat larger than the standard errors of simple random sampling. They are only approximations, since the effects of clustering vary depending on the item being measured.

Where averages and aggregates are estimated from samples, particularly when the distributions are skewed and contain a few cases with very large values, *precise* or reliable estimates of the sampling errors (as well as the averages and aggregates themselves) are difficult to determine but are substantial. The over-

sampling of serious accidents was designed to reduce the sampling errors of these dollar estimates, but whenever a few cases account for a substantial fraction of the estimated aggregate, variation from one sample to another is bound to be large. When aggregates are estimated by multiplying averages by estimates of the total number of cases in the state, an additional source of error is introduced since the total number of cases is also an estimate, even though it may be from a different source.

In view of the substantial errors that can result from the combination of response errors, sampling errors, and estimates of aggregate numbers, all that can be said about the aggregates is that they are of the correct order of magnitude and may be subject to revision if further studies are conducted.

In general, findings about differences between proportions are discussed only when they are statistically significant, i.e., not likely to have arisen by chance in sampling a population where no real difference existed. Estimates of average or aggregate dollar amounts are presented, however, even when differences from zero or from some other average might be only a sampling variation. In a pioneering study of this sort, it is felt that some information is better than none.

APPENDIX B

Injured Person's Questionnaire

A large variety of questionnaires were used in the survey; there was a mail questionnaire for persons reported on police records, another for defendants' attorneys, and another for hospitals; there was a personal interview questionnaire for persons injured, another for a survivor or relative of an injured person who could not answer personally, and a third for claimants' lawyers. There was a telephone interview questionnaire for individual defendants, and other subsidiary telephone questionnaires were used to supplement various reports. A reproduction of the principal documents can be obtained from the Survey Research Center, Ann Arbor. Inquiries should identify the subject as Study 687.

As an example, the questions asked in the most extensive of the questionnaires—the ones given by personal interview to serious injury victims—are reproduced below. They are presented without various instructions given to interviewers such as to skip some questions where inappropriate, or to obtain specific detail in others.

Effects of Auto Accidents. A1. Were you driving, riding in a car or truck, walking, or what? A2. How many others were in the car (truck) with you? A3. Were any of them injured or killed? A4. How many? A5. Were any of the injured or killed related to you? A6. How were they related to you? A7. How many cars or trucks were involved in the accident, including the one you were in?

Medical Care. B1. First of all, what sort of injuries did you have? B2. Were any bones broken? B3. As a result of the accident, were you treated by a doctor. . . either right after the

accident or later on? B4. As a result of the accident, did you go to a hospital or clinic for treatment. . . either right after the accident or later on? B5. What was your total medical expense, including any costs for home care, medicines, dental work, braces, hospital out-patient service, doctors, and so on? B6. What hospital, or hospitals, did you go to? B7. Is that here in town, or where? B8. About how many days were you there, altogether? B9. What was your total hospital bill, including any out-patient service, regardless of who paid it? B10. How many people were covered by this bill? B11. Were there also doctors' bills *not* included in the hospital bill, either for treatment in the hospital or for treatment after you got home? B12. How much did they amount to, altogether? B13. Were there any other medical costs for care outside the hospital, such as for home care, medicine, dental work, braces, or anything like that? B14. How much did they amount to, altogether? B15. Have you received any help in paying your medical expenses. . . such as from your own insurance—like Blue Cross or Blue Shield, or from someone else's insurance, workmen's compensation insurance, or someplace like that? B16. Then you paid all your medical expenses yourself, is that right? B17. Who helped pay your medical expenses? B18. How much did _____ pay? B19. Was this your insurance company or someone else's? B20. Did you have to pay any of this money back? B21. Who did you have to pay it back to? B22. How much did you pay back to _____? B23. Did you receive any *free* medical care, such as at a VA hospital, a state hospital, a free clinic, or any place like that? B24. Would you tell me something about it? B25. Are you getting any medical care now because of the accident? B26. What is this for? B27. How about the future, do you think you will need any medical care in the future to help you recover from the accident? B28. What will this be for? B29. Has a doctor (or dentist) recommended that you have this done? B30. Do you expect to have any of this done? B31. Why is that? B32. How

much (would) (will) this cost you altogether, do you think? B33. (Would) (Will) you have to pay this out of your own pocket, or what? B34. Everything considered, how do you feel about the medical care you got as a result of the accident, were you satisfied or dissatisfied or what?

Damage to Automobile and Other Personal Property. C1. Was a car (truck) belonging to you or your family involved in the accident? C2. How much did the damage amount to, from the accident? C3. About how much was the car (truck) worth just before the accident? C4. Did you have to pay any towing or storage charges after the accident? C5. How much did they amount to? C6. Do you still have the car (truck) now? C7. When did you get rid of it? C8. Did you sell it outright, trade it in on another car (truck) or what? C9. How much did you get for it, if anything? C10. Did you have any of the damage from the accident repaired? C11. How much did the repairs cost? C12. Did *the other person's* insurance pay for any repairs, or give you any money to cover damages to the car (truck)? C13. How much did this amount to? C14. What about *your own insurance*, did it pay for any repairs, or give you any money to cover damages to the car (truck)? C15. How much did this amount to? C16. Did you have to pay back any of the money to your insurance company? C17. How much did you have to pay back? C18. Did you have any (other) personal property that was damaged or destroyed in the accident? C19. What was it? C20. How much would you say the damage amounted to? C21. Was any of this paid for by insurance? C22. Whose insurance paid for the damage? C23. How much did _____(s) insurance pay?

Other Expense. D1. We've talked about your medical costs and property damage resulting from the accident. Sometimes people have other expenses because of an accident, for emergency transportation, extra household help, and things like that. . . . Did you have any other expenses as a result of the accident, that

we haven't talked about yet? D2. What were they for? D3. How much have they amounted to, so far? D4. Was any of this paid for by insurance? D5. Whose insurance paid? D6. How much did _____ ('s) insurance pay? D7. Did you have to pay any of this money back? D8. How much did you pay back, altogether? D9. Do you expect to have any (other) future expenses resulting from the accident that we haven't talked about already, such as for extra household help, and so on? D10. What would they be for? D11. Anything else? D12. How much do you think they will amount to, altogether? D13. How long do you think these expenses will continue? D14. How will these expenses be paid?

Income Loss and Financial Adjustment. E1. Did you have a regular *full time* job at the time of the accident? E2. Were you looking for work at the time the accident happened? E3. What kind of work were you looking for? E4. After the accident, did you get a regular full time job? E5. What kind of work was this? E6. Do you have a regular full time job now? E7. Do you think you are now earning more or less than you would be if the accident hadn't happened? E8. About how much (more) (less)? E9. Why is that? E10. How about the future, do you expect this to continue or what? E11. What kind of full time work were you doing? E12. Were you working on the job when the accident happened? E13. Were you on your way to or from work? E14. Did you lose any time from work because of the accident? E15. How much time did you lose from work because of the accident? E16. After the accident, did you go back to the *same kind* of job you held before? E17. What kind of job did you go back to? E18. Do you have a regular full time job now? E19. Do you think you are now earning more or less than you would be if the accident hadn't happened? E20. About how much (more) (less)? E21. Why is that? E22. How about the future, do you expect this to continue, or what? E23. About how much income did you lose altogether because of the accident? E24.

About how much were you earning per year at the time the accident happened, before taxes or any deductions? E25. What happened about your salary while you were not at work, did you receive full pay, sick leave pay, take vacation time, or what? E26. About how much did you get from _____? E27. Did you receive any payments from Workmen's Compensation because of the accident? E28. How much did you receive from Workmen's Compensation, not including any payments for medical care? E29. Were you (also) doing or planning to do, any *part-time* work at the time the accident happened? E30. What kind of part-time work were you doing (or expecting to do)? E31. Did you miss any part-time work because of the accident? E32. How much *more* money would you have earned from part-time work if the accident hadn't happened? E33. Have you done any part-time work since the accident happened? E34. Do you expect to do any part-time work in the future? E35. Did you have to borrow any money to meet expenses? E36. Did you miss any payments you were making? E37. Did you move to a less expensive home? E38. Do you still have any bills or debts that resulted directly from the accident? E39. Did you have to cut your family living expenses in any other way that we haven't talked about? E40. What expenses did you cut? E41. Did you receive any help in paying your accident expenses from friends, relatives, church groups, lodges, welfare agencies, or any place like that? E42. Who helped pay your expenses? E43. How much did _____ pay? E44. Did you have to pay any of this back? E45. How much did you have to pay back, altogether? E46. After the accident, did anyone else in your family help out by going to work or working more? E47. Who was it? E48. How long after the accident did he (she) keep working (or working more)? E49. About how much (did this add) (has this added) to your family income, altogether? E50. Did the accident cause *any (other)* financial difficulties that we haven't discussed already? E51. Would you tell me something about

them? E52. What about the *future*. Will the accident make a difference in how much work or the kind of work you can do in the future? E53. Why is that? E54. In the future, do you expect to receive any kind of disability payments or pensions because of the accident? E55. When will this start? E56. How much will it amount to?

Compensation and Legal Proceedings. F1. First of all, did you have automobile insurance at the time of the accident? F2. After the accident, did you get any kind of help or advice from your auto insurance company? F3. Would you tell me about it? F4. After the accident, did anyone suggest that you go to see a lawyer? F5. *Did* you see a lawyer after the accident? F6. Why didn't you? F7. How many weeks after the accident was this? F8. Was the lawyer someone you had been to before? F9. How did you happen to go to the lawyer you did—was he someone you knew, was he recommended by a friend, or what? F10. Had you ever used a lawyer's services before this? F11. Did you *hire* a lawyer to handle your case? F12. Why is it that you didn't? F13. How much were you charged for *advice* by the lawyer(s) you talked with? F14. We may want to ask your lawyer about legal questions and expenses in the case. Is that all right with you? F15. Would you fill this slip out, so he'll know it's all right to talk to us? F16. Would you give us your lawyer's name and address (without signing the form)? F17. Was there any time during the case when you didn't agree with your lawyer? F18. Would you tell me about it? F19. Did the other person in the accident or his lawyer or insurance company make any offers to you, to settle the case? F20. What was their first offer? F20a. How long after the accident was the offer made? F20b. At the time, did you mention to them some sum of money you would accept? F20c. How much was it? F21. In most accidents, if someone is at fault he is expected to pay the other person's medical expenses and damages or pay him a cash settlement. Did you receive anything from the other person or from his insurance company? F22.

Then you or your insurance company paid all your expenses, is that right? F23. Who helped pay your expenses? F24. How did it happen that you didn't get a settlement? F25. Are there any other reasons you can think of? F26. Was the driver of the car that hit you insured? F27. Do you think you could have collected something if you had been willing to go to the trouble? F28. Why is that? F29. I'd like to find out something about the settlement. First of all, how much were your legal expenses and court costs, if any? F30. How much money did you get after paying your legal expenses and court cost? F31. In addition to that, did they also pay for your medical care, car repairs, or anything. . . or was it all included in the settlement? F32. What else did they pay for? F33. How much did this amount to? F34. Was the other person insured, or did he have to pay the settlement himself? F35. How do you feel about the amount you got? Was it fair in view of what happened, or too little, or quite generous, or what? F36. Why do you say this? F37. Do you think you could have gotten more if you had done things differently? F38. Why is that? F39. Are there any other reasons you can think of? F40. Why is it that you didn't do this? F41. Did you or your lawyer ever actually file a suit for damages? F42. Why not? F43. In what county was the suit filed? F44. How much did you sue for? F45. Was the case finally settled by a ruling of the judge or jury, or was it settled outside of court, or what? F46. What made you decide to settle outside of court? F47. Any other reasons? F48. Did you actually have to appear in court? F49. Did your case come to trial? F50. Was it a jury or a non-jury trial? F51. How do you feel about the *trial*—did your case get a fair hearing, or what? F52. About how many hours did you spend altogether trying to collect damages in this case? F53. Did you miss any work because of this? F54. How much work did you miss? F55. Did you lose some income because of this? F56. How much income would you say you lost? F57. When was the case finally settled? F58. *Everything considered*, how do you feel about the way your case went? F59. Could you tell me a little more about it? F60.

Did anyone file a court suit *against* you or your insurance company, in connection with the accident? F61. How did it turn out? F62. As far as you know, have any (other) suits been filed in court because of the accident? F63. Who was suing, do you know? F64. Who was being sued? F65. Where was the suit filed, what county? F66. Have you ever been injured in any other auto accident before or since the one we talked about? F67. Did you receive any settlement in that case? F68. *Before* this accident happened, had you ever sued anyone or been sued? F69. Had you ever been in court as a member of a jury, or as a witness? F70. How do you feel about the way you were treated by the other person's insurance company?

General Opinions and Attitudes. The next questions are more general than those I have asked you so far. We just want to see how you feel about various things. G1. How do you feel in general about suing people—do you think people should sue whenever possible, or settle things without a suit, or what? G2. Can you think of anything that should be done to make things easier for people who are in automobile accidents in the future? G3. Anything else? G4. What do you think should be done if the person at fault in the accident doesn't have enough insurance or money to pay for the damages to other people? G5. When the person at fault *does* have enough insurance to pay damages, should he pay the injured person only for his medical expenses and lost income, or should he also pay something for the pain and suffering, or what? G6. Why do you say this? G7. Do you think an insurance company will usually offer a larger settlement if you have a lawyer than if you don't? G8. Should a lawyer be paid even though he loses the case? Now these next questions are even more general, still. G9. If a product just isn't made right, should the seller be forced to pay a penalty as well as refund the purchase price? G10. Do you think most people care what happens to the next fellow? G11. Would almost anyone tell a lie to keep out of trouble? G12. Is it better to believe in people or to be

suspicious of everyone? G13. Do you think most people will be nice to you if you are nice to them?

Demographic Data. H1. What is your occupation? What sort of work do you do? H2. What do you usually do when you are working? H3. What kind of business is that in? H4. Do you work for yourself, or someone else or what? H5. Do you have more than one job? H6. What is the other job? H7. Did you earn any money during 1959? H8. About how much were your own earnings for the calendar year 1959, before taxes or any deductions? H9. Does anyone else in your family have a job? H10. Who is it? H11. What does he (she) do? H12. Now, would you tell me how much income you and your family made *altogether* during the last calendar year, 1959. I mean before taxes, including the income of everyone in the family? H13. Do you own your own home or pay rent or what? H14. Do they own this home or rent, or what? H15. Who else lives here with you and how are they related to you? H16. How old are you now? H17. How many grades of school did you finish? H18. Have you had any other schooling? H19. What other schooling have you had? H20. Do you have a college degree? H21. Do you belong to a labor union? H22. Are you a veteran? H23. Is your religious preference Protestant, Catholic or Jewish? H24. What denomination is that? H25. Is that orthodox, conservative or reform? H26. Where did you grow up? H27. Was that on a farm, or in a city, or what? H28. Finally, would you like a free copy of a report on this study?

Interviewer: Fill Out. J1. Race. J2. Length of interview. J3. Number of calls. J4. Who was present during the interview? J5. How would you describe the interior (furniture, draperies, paint)? J6. How would you describe the outside of the dwelling, the yard, etc.? J7. This is a [type of structure]. J8. Does the respondent speak English? J9. Is the respondent alert and able to answer questions easily, or does he have difficulty understanding and answering? J10. Has the injury left any obvious disfigurement, dismemberment, disability, etc.? J11. What records were looked up during the interview?

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