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THE PRODUCT LIABILITY SYSTEM AND
CERTAIN NO-FAULT PROPOSALS

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of the requirements for

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A. Allan Schmid

Major professor

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1978

THE PRODUCT LIABILITY SYSTEM AND
CERTAIN NO-FAULT PROPOSALS

By

William Leslie Welch

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ABSTRACT

THE PRODUCT LIABILITY SYSTEM AND CERTAIN NO-FAULT PROPOSALS

By

William-Leslie Welch

Product liability actions are claims against manufacturers and others by injured consumers and workers for damages caused by negligently or defectively manufactured products.

In the mid-1970's, the product liability issue gained much public attention and was identified as a serious threat to the stability of this country's industrial sector. These conditions were brought about by several large judgments and court decisions which sent tremors through the manufacturing and insurance communities. The number and size of claims caused the insurance community to quickly and substantially raise their product liability rates and cancel coverage of many firms.

Since industry-wide information on product liability is very limited, this author used data from the U.S. Government and the Insurance Services Office to generate three estimates: first, the annual flow of funds which permits measuring the product liability system's size relative to the manufacturing and insurance sectors; second, the distribution of these funds among the various actors in the system; and third, the impact of certain synthetic no-fault

proposals on the product liability system. Several of the no-fault provisions had been put forth by Jeffery O'Connell.

Major Findings--Existing System

The system's activity in 1976 was computed on the basis of 70,000 claims of which 63,000 are consumer accident claims and 7,000 are worker accident claims.

For consumer accidents, total funds flow, which is roughly equivalent to manufacturer premium payments plus other expenses, was estimated at \$885 million. The distribution of these costs were:

--to consumer claimants for damages, pain and suffering and punitive payments	\$252 million	28.5%
--to legal community for legal services to all parties	\$172 million	19.4%
--to insurance companies for administration, underwriting expense and profits	\$461 million	52.1%

For workplace accidents, the funds flow was \$411 million which was distributed:

--to worker claimants	\$146 million	35.5%
--to legal community	\$ 90 million	21.8%
--to insurance community	\$175 million	42.7%

Thus, the \$1.37 billion in total funds flow of the entire system is barely 0.1 percent of total manufacturing sales in 1976 and only 1 percent of total premiums paid in the whole U.S. insurance industry. The overall size, thus the potential threat of the issue, appears to have been largely exaggerated.

A close examination of the ISO data revealed that severe problems do exist in certain industry sectors, particularly automotive,

drugs and industrial equipment which are interestingly already subject to intensive federal safety regulation.

Major Findings--Consumer No-Fault

Over 85 percent of the consumer claims were tested under a synthetic no-fault system which eliminated pain and suffering, punitive damages, and payments in excess of economic loss. Moreover, the system assumed a greatly simplified legal treatment of claims.

The funds flow increased substantially to \$998 million with most increases (94 percent) being paid to "Claims Paid under No-fault" which were "Claims without Payment" under the fault/tort system. The legal savings and the other savings from collateral offsets and elimination of pain and suffering were surprisingly minimal.

Very little was found to support the use of no-fault in product liability.

Major Finding--Workers' Compensation
as Sole Remedy

The comparison was made with the use of an enhanced Workers' Compensation system as sole remedy for accidents in exchange for the workers' foregoing their tort rights. The government listed an estimate for upgrading existing Workers' Compensation system to the levels of the Federal Employment Compensation Act. The added costs of the cure were 4.5 times to 11 times the total cost of running the entire Worker PL system. The trade off does not appear to be suitable for the manufacturing sector.

Dedicated To

Miss Margaret A. Campbell

A Dear and Beloved Friend

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INTRODUCTION

When first describing a piece of research, it is oftentimes better to say what it is not. This technique is appropriate here. The book is not, nor is it intended to be, a comprehensive or all encompassing view of the Product Liability question, nor is it merely a listing of the various tort remedies suggested by so many special interest groups. The former would be too big; the latter too superficial. These two approaches have filled thousands of pages in legislative hearings throughout this country's State houses and hundreds of pages in newspapers and magazines, and thus, require no further treatment here.¹

Then what is furnished? First and foremost, this study will give policymakers a three year preview of the Product Liability reporting system of the insurance industry. In 1980, the major carriers have agreed to break out, as a separate line item, those premiums received for product liability² (PL) as well as that portion of Comprehensive General Liability allocated to PL. Thus, at some moment in late 1981, the true extent of the funds flow in the product liability system will be known. In the meantime, this author, using mostly secondary data from the Insurance Services Office and the Commerce Department along with certain informed assumptions, has estimated the total funds flow of the system as it existed in 1976.

Secondly, estimates were made on the impacts of no-fault implementation again with many assumptions and also for the 1976 base year. Comparisons were generated both on the consumer and worker side as well as for Bodily Injury and Property Damage claims.

The purpose here is to provide decision makers some additional insights into the issue. Unlike the ISO report which admittedly does not reach any conclusions, positions are taken and recommendations are made in the latter Chapters. This comment does not fault the previous researchers, because, until the ISO Closed Claim Study, few reliable surveys existed; none on a comprehensive basis, that is across the full industrial sector.

Part 1 consists of three chapters. Chapter I explains PL in terms of public policy issues. Any change in the rules of a society tends to change the property rights between individuals. This is certainly true in PL and it is explained thusly. In Chapter II, the recent history and background of this issue is provided. This section does not acknowledge the considerable effort being made by many in the area of tort reform of PL because while this author considers tort reform an important approach to the issue, it is not within the scope of this study. Chapter III restates and analyzes several no-fault proposals made by one of its most well-known proponents, Jeffery O'Connell.

The contents of Part 1 are intended to establish the minimum setting for understanding the analysis of Part 2.

Part 2 is the analysis and also consists of three chapters. Chapter IV describes the methodology used to estimate the size and

scope of the existing Product Liability System for the given calendar year 1976, and then goes on to provide that estimate. In addition, included are detailed breakdowns of the claims activity in the various types: Bodily Injury and Property Damage, and Consumer and Worker claims.

Chapter V does two things. First, a synthetic no-fault system is superimposed onto the estimate of the 1976 product liability system. Second, the results are remeasured and compared to the existing system. The impact of no-fault changes on manufacturers' premiums, legal expenses, net dollars to claimant and more are set forth in both absolute and relative terms.

In Chapters IV and V, the author developed and used a new yardstick for comparisons within each system and between the fault/tort and the no-fault systems. The "Coverage ratio" is the ratio of "Claimant Net Dollars Received," after deduction for legal expenses divided by the estimated "Economic Losses" incurred by that group of claimants. This indicator reveals, in a rough but understandable form, a measure of system payments from the viewpoint of the injured claimants.

Chapter VI summarizes the highlights of Part 2 and offers some important comparisons of fault/no-fault and product liability/medical malpractice.

FOOTNOTES--INTRODUCTION

¹See Bibliography--Group II for a list of over 100 articles.

²For a detailed schedule of the new reporting requirements see: Business Insurance, June 26, 1978. Tentative agreement was reached at National Association of Insurance Commissioners to commence listing of PL premiums in 1980. Statements are to be filed in 1981.

PART 1

BACKGROUND

CHAPTER I

THE PUBLIC POLICY ELEMENTS OF PRODUCT LIABILITY

Product Liability as a System

The most important thing to do when commencing a public policy study is to delimit the scope and nature of the issue. It is also necessary to establish some common concepts upon which are hung the clapboards of the conclusions. These requirements are particularly acute for Product Liability for many reasons. Product liability, like so many issues in a modern and mature, industrialized society, is very complicated and should not receive the superficial treatment given so many issues in the search for solutions to perceived difficulties. The differentiation also must be made between the public policy elements involved and the policy options available to the political decision makers. This portion of the study will include only the description of public policy elements whereas some policy options will be covered later.

First, it must be established that Product Liability as it exists in the United States should be viewed as a system with its associated flows, characteristics and components. The product liability system possesses inputs such as claims, premiums, collateral source payments and many more; then this system has the means to process these inputs utilizing a given set of rules established by

society which in turn produce the outputs such as: payments to claimants for economic losses, and, pain and suffering, payments to the legal community, to the insurance companies. Expanding on this concept further, product liability system is merely a subsystem of a larger system which in the view of the society has similar but larger goals. This is the goal of spreading the costs of accidents occurring in the society in some orderly and predictable manner. The subject is Accident Compensation.

Continuing, there are subsystems within product liability; these are independent and integral parts as in most systems but have features which are both common and not common to each other. Here, the major subsystems are those involving consumer losses and worker losses. It may not be obvious but subsystems and the construction of the available data tend to be multi-dimensional in nature, meaning that system summaries or breakdowns can be developed upwards or downwards. In other words, bodily injury losses and payments can be summarized without regard to the consumer or worker distinction; or worker losses and payments can be summarized including the two types of losses, bodily injury and property damage.

Even the casual observer cannot help recognizing that product liability is a multi-disciplinary issue. Involved are at least the disciplines of economics, law, insurance,¹ engineering, science, and medicine. In this study, the preponderance of the treatment falls only on the first three: economics, insurance and the law in approximately that order of importance. The other disciplines do

operate within the issue but more on the technical aspects in such areas as prevention of accidents, product design or innovations.

One of the important concepts to keep in mind when seeking a solution to a multidisciplinary problem is that solutions under the most simple conditions must take into account the impact of change in one discipline as it affects another. Under more complicated situations, changes in one discipline will require significant changes in another for the solution to work or even for the system to keep on functioning. One also must be sensitive to another multidisciplinary phenomenon called "marsh economics."² This word action analogy describes interdisciplinary effects as being similar to "walking on spongy marsh" where pushing down a problem at one point merely causes a different problem to arise at another point.

What is a system called which operates between individuals and actors in a society and has capacity to affect and determine the welfare and relative opportunities of those individuals? It is an institution. Institutions in our society are becoming increasingly subject to a close review of their structure, conduct and performance³ as they affect the welfare of the people they serve.

By structure is meant the rules which determine whose property rights are involved, under what conditions does certain relief or action become valid, and who decides who decides. Before developing the above elements, the concept of property as it applies to product liability must be defined at least in broad terms. Property, in a public policy sense, goes far beyond the narrow real property definition. It can be defined as the rights and obligations between

individuals in a society as established by its law or tradition.⁴ In product liability, property encompasses the results of actions of one individual upon another either for injury, or, for pain and suffering. The relationship of liability or responsibility for physical damage to real property is obvious. Within this paradigm are two other principles which should be kept in mind. The first is that property or a right held by person A does, in fact, establish limits on the actions of person B. This becomes immensely important when one considers change or even the more difficult task of attempting to predict the results of change. To be a touch simpler, a relaxation in the constraints of person A or additions to the opportunity set of A, restricts the opportunity set of B. It must be noted that this is an extreme simplification especially when applied to product liability. There are in fact many A's and many B's. For example, besides the claimants, other benefactors may be the insurance companies and members of the legal community, both the defendants' and plaintiffs' counsel.

The product liability system, as constructed, defines the claimant's property right to sue the manufacturer and other merchants in the stream of commerce for damages incurred either in the form of bodily injury or property damages which had been caused by the defect in a product. The relief for the injury either to his body or other property is provided for by the Tort system. This right falls under the category of private ownership which means that the decision to sue or the control of the decision lies with the individual.⁵ Of course, this right is granted by the rules of the society.

What are the jurisdictional boundaries of the issue? In the broadest possible view, product liability is restricted to the sophisticated and industrialized economies in which the means of production are privately owned. So, at the moment, the North American Continent, Western Europe, Japan and Australia are the areas concerned with PL. Only limited articles could be found which described the issue in these countries.⁶ For purposes of the study, the geographic jurisdictional boundary shall be the United States only, due to data limitations.

The distinction must also be made on the two major sub-groupings within the issue: the consumer claimants and the worker claimants. The similarity between the groups lies in the injuries caused as a result of a defective product; whereas the major difference is the activity of the claimant at the time of the accident. If the accident occurs while a person is working, it is considered a worker accident; under all other circumstances, the accident is considered a consumer accident. Note that under the present tort/fault system, no distinction is made between employee and consumer accidents, but if no-fault provisions were imposed, precise legal distinctions and separations would become necessary.

Even under the present system where little real distinction is made between consumer claims and worker claims under tort, the externalities are substantially different in the two types of accident. An externality is a result, condition, or an effect (i.e., a cost) which can be largely ignored by a decision maker; by definition, it is considered external to the decision process. In a major

way, the differences in externalities are reflected in the amount and type of collateral source payments available to the injured party. For example, an injured worker under the legislation of every State has a guaranteed entitlement which is a right to recovery of some direct medical expenses as well as partial wage losses over a limited term regardless of other sources of relief. The consumer does not have such a direct guarantee of relief. However, it will be pointed out later in the study that large proportions of the population is covered by either some form of medical insurance which provides some relief of direct medical expenses,⁷ or by welfare transfer payments which have the same result. The existing rule of law called the "collateral source rule" specifically prohibits introducing evidence of collateral source payments in a product liability tort action. In this way, collateral source payments are purposely and consciously maintained as externalities in the tort process. On the other hand, a provision of no-fault would require an accounting of collateral source payments, the sum of which would be deducted from the estimated economic loss.

Actors

Who are the actors in the system? Included are the injured parties and the claimants, lawyers on both sides of the tort, insurance companies and, of course, the manufacturers. Beyond these is a secondary set which includes the public purchasers of goods and government and other major parties in the stream of commerce, namely the wholesaler, retailer and distributors. It is not appropriate to categorize the actors as cost bearers or non-cost bearers.

Rule Changes

Rule changes in product liability take place in two simple ways similar to other public policy changes in our society: by statute, either at the state or national level and by legal precedent. The latter changes are evolutionary in nature; the former is a formal process and is the most common societal rule changing mechanism existent in the U.S. today.

Outputs

The outputs in this system will be as objective as possible. Here the benefits will be measured in dollars. A dollar received by party A will be considered equal to that paid by party B. No adjustments are made for possible differing utilities by the parties. The issue here is "Who receives" or "Who benefits" from the funds flow. Receivers of the greater shares of funds are the claimants themselves, the attorneys on both sides of the tort, and the insurance companies. Providing the inputs or costs are the manufacturer, via the premiums paid and payments in excess of coverage as well as some internal legal expense. Some costs are borne by the legal community for the unpaid services for lost or underpaid tort cases. These costs shall be ignored. The costs of accidents borne by the claimant are not necessarily considered an input but more as an a priori condition of the system, an exciter or initiator of the process.

Efficiency

Every legislative analyst at one time or another has proposed that a piece of legislation performs a given function "more efficiently" or "less efficiently" than another bill. If that were not true, much of the underlying rationale for legislation would be removed. Unfortunately, the highly value-laden term cannot be entirely avoided or ignored in product liability. The tendency of analysts is to apply a single level of efficiency to the entire workings of a system, thus more often than not it results in horrible mistakes and amateurish inaccuracies which eventually are made public.

However, one must remember a very important point about efficiency, that is its similarity to art. By this is meant, efficiency as art, is gauged or judged primarily through the eyes of its beholder. One's own values and perceptions, developed over a lifetime, distinctly affect one's judgments about efficiency. As different individuals have different perceptions of the same phenomenon, so also will they have different measures of efficiency.

The solution comes down to political decisions based on judgments of efficiency serving the objectives of each individual decision maker. Force of power, argument, and matters of immediate or long term political gain become important in settling the differences.

How can these troubles be avoided? Most assuredly they cannot be either avoided or ignored in the final determination of a solution. One can only hope to minimize the rhetorical nature of the argument by reasoned study using the best set of facts available.

True, facts are not necessarily facts in any given argument, so the ultimate argument turns on the accumulation of facts and the preponderance of evidence. The general components of internal and external consistency also arise. In this study, the matter of efficiency will be addressed again because it cannot be avoided, by a disaggregated treatment of the effect of changes on the various actors. In other words, the system will be disaggregated as much as possible and examined for efficient cost/benefit distribution in small components first. If the findings are consistent then generalizations are made; if the examination of the small components are not consistent, then they are laid out to find the underlying reasons for the inconsistencies. To be successful, a balance must be continuously sought between a reasonable small component which can be generalized within itself and yet not too small a component such that the generalization cannot be applied externally.

FOOTNOTES--CHAPTER I

¹Some may contend that insurance comes under economics; maybe so or maybe not, it is not important to conclusions.

²First described to me in a lecture by Dean Richard Lewis of MSU circa 1968.

³The best description of these principles is carried in short monograph by Schmid-Shaffer: "Community Economics--A Framework for Analysis of Community Economic Problems," 1975.

⁴Ibid.

⁵Ibid.

⁶For a good capsulized treatment of issue in a global sense, see: "Product Woes Called World Wide Concern," The National Underwriter, December 30, 1977.

⁷A July, 1978 interview with a Michigan Blue Cross/Blue Shield Official yielded an estimate that only 40 million or 18.2 percent of the U.S. population is without any coverage for medical care. This includes both those persons or families electing no coverage as well as those above the welfare line but not able to afford coverage. Coverages available include private, medical, medicare and welfare.

CHAPTER II

RECENT HISTORY OF THE PRODUCT

LIABILITY ISSUE

The product liability system works as it does today through a set of laws which establish the opportunity set or options of the actors. These laws and accepted legal principles have developed in the courts over the course of the last 140 years. Since other competent researchers¹ have traced the evolution of these principles as well as compiled and accurately explained both the rationale and interrelationship of these principles,² a further treatment here is deemed not necessary.

A recent "best" estimate of Product Liability (PL) claims initiated in 1976 was 70,000.³ This figure represents actions initiated against manufacturers,⁴ processors, and others in the channels of distribution. These claims are brought by consumers or workers who have suffered personal injuries or property loss resulting from the use of an allegedly defective product. It is interesting to note that 56 percent of all claims are filed against firms in the foods and fiber industry.⁵ Even though the Food and Fiber industry has a majority of claims, generally these claims are relatively small in size. Nevertheless the impact of any policy decisions in the product liability system will have an undeniably

significant impact on this industry. The largest and most publicized suits are those resulting from the personal injuries of: (1) consumers using either automobiles or pharmaceuticals; and (2) workers injured by machines at the workplace.

In 1976, the problem, foreseen by some experts ten years earlier, began to gain public attention. These experts trace much of the problem to the definition of strict liability in the Restatement of Torts of 1959. The main problems as perceived by the industrial community in 1976 were:

Total Unavailability of Product Liability Insurance. Several carriers were cancelling existing policies and refusing to quote on new business. The insurance community appeared reluctant or even adamantly unwilling to accept any additional risk exposure for product liability.

Partial Unavailability of Product Liability Insurance. It was imposed in two ways: (1) by carriers substantially increasing premiums--ten to 20 times increase for the same amount of coverage; (2) by narrowing the coverage limits of product liability insurance: that is, by raising deductibles and lowering maximum coverages.

Product Introduction and Discontinuation. It was suspected that several firms were withholding socially beneficial products because of their product liability problems. One need recall the case of The Swine Flu vaccine in 1976. Here, the vaccine manufacturers could neither secure insurance for the risks nor were they willing to "go bare" which means "self-insured" for that product. The result was an outright refusal of all manufacturers to produce

a socially beneficial product demanded by government. Eventually, it was required that the federal government assume the liability by statute and exempt by law the manufacturers of any liability for this product. The swine flu problem is, of course, not resolved as of the moment because the government is being sued for bodily injury by about 150 claimants for vaccine related injuries; the damages sought exceed \$3 billion. It is not known how pervasive was the non-manufacture of dangerous but socially beneficial products during this period.

Increased Claims. There were several estimates which stated that the number of new claims per year exceeded a million. A further distressing estimate was that the filings of new cases were accelerating at a very rapid rate.

Business Failures. Circumstantial evidence suggested that the product liability problem differentially threatened small businesses in high product-risk industries. Statistics on small firms indicate that they are generally much more vulnerable to business failure than larger firms. The classical reasons for failure are low-capitalization and poor management. A small firm is likely to be particularly vulnerable to large product liability actions since a small firm can absorb neither massive premium increases nor the cost of a major injury judgment. Therefore, if the estimate of new claims is correct, the impact on the small business community could be devastating. This is particularly important for rural areas with its preponderance of small firms.

These perceptions caused great concern, some say near panic, in certain industrial groups. Then, as often happens in our system of government, the public sector "recognition" of a problem brings a public "call to action" which is lead by those affected or threatened by it. The activity was commenced primarily by the manufacturers and trade associations and the Chambers at the municipal and state levels. In early 1976, prodded by the "call to action" and the finding that the issue was unbelievably complex and replete with complicated interrelationships, the White House ordered that an Executive Task Force be formed. It was named the Interagency Task Force on Product Liability (ITFPL) and was mandated: (1) to compile data on the issue from existing and new sources, (2) to analyze the breadth and seriousness of the above stated problems, and, (3) to make legislative recommendations leading to alleviation of the problems caused by the system's operation. The U.S. Department of Commerce was given the overall responsibility for conduct and policy guidance of the Task Force. In total, seven Cabinet departments,⁶ two White House Groups--OMB, CEA--and two independent agencies--SBA, CPSC--participated.

As the Task Force activity began, it was determined that the Product Liability issue lacked even the minimum data necessary for a cosmetic analysis. Therefore, the ITFPL found it necessary to employ three contractors (1) to compile the existing available data⁷ and (2) to conduct independent surveys in the important sectors:

1. manufacturing
2. insurance
3. legal

The combined output of the three sector reports (ten volumes, about 3000 pages) was published in the Spring of 1977.

From then until October, 1977, the ITFPL staff prepared the final report (about 600 pages) which had a limited release on October 31, 1977. This Final Report condensed, clarified and brought together the sub-issues from the three independent surveys. Most importantly, the Final Report contained descriptions of the many remedies along with limited and qualified recommendations for their implementation. Such comments as "should be studied further" and "worthy of further consideration" were scattered throughout the publication.

A strong recommendation of the Final Report was a very simple one: any remedy to the Product Liability problems must be national in scope because of certain specific difficulties. In other words, any remedy must be imposed on the system at the national level and not on a "state-by-state" basis. The underlying rationale is to eliminate the problem of interstate differences in the insurance rate-making process. The situation must be avoided whereby a patchwork of states have remedial measures implemented while others do not. Under a patchwork arrangement, the insurance underwriting community usually recognizes only the worst possibilities and computes rates actuarially based on the worst conditions likely to occur. While the Workers' Compensation System was implemented in a patchwork manner over a 40-year period, there are fundamental differences⁸ which prevent the state-by-state approach to the product liability issue which were not present in Workers' Compensation.

The "final" ITFPL Report of October, 1977 was not final. The White House essentially accepted the Task Force recommendations but correctly requested further amplification. Therefore the Task Force was asked to develop and submit a fully detailed set of options. These were submitted to the White House on February 24, 1978 and later published in the Federal Register.⁹

The "Options" paper included five sections each addressing a different aspect of the issue. These were: (1) a general description of the issue, its nature and scope, and comments about calls for legislation; (2) listing of principal options which address the causes of the problem; (3) options for non-cause related remedies; (4) options for other government action in Accident Compensation and (5) Department of Commerce recommendations for executive and legislative action.

The document lists, in considerable detail, many suggestions for an examination of the insurance rate-making process also including the option of federal reinsurance. The specific recommendations related to this research are quoted:

V B.3 Draft legislation for Federal Standards in the Area of Workers' Compensation should include a provision that would render Worker Compensation a sole source of monetary recovery for Workers injured in product related accidents.

V B.4 A study should be conducted to determine whether a practical no-fault product liability system can be developed, in whole or in part, for consumer products.¹⁰

Types of Changes

Before proceeding with the analysis of the Option Paper recommendations, a summary discussion should be provided on all the

types of changes being considered. The many changes in Product Liability which are being pushed by various proponents can be separated into three relatively distinct categories: (1) financial structure modification for the insurance industry, (2) tort reforms and (3) no-fault systemic changes. A rather complete listing of tort remedies and financial modifications have been included as a footnote.¹¹

The financial reforms concentrate on the structure of the insurance industry including such issues as IRS regulation on liability insurance, availability of federal insurance and information flows within the system. Rate making procedures by carriers and self-insurance by the manufacturers are also considered.

Tort reforms represent modifications or adjustments to the existing tort system for handling product liability claims. These are usually procedural or evidentiary in nature. The reforms in some way control the actions of the parties before or during the trial or define the evidence which may or may not be introduced.

Examples will better illustrate tort reform application. For example, the existing "collateral source rule" prohibits the defendant from introducing or seeking information in court regarding reparations received by the plaintiff from other sources. This is a common situation in industrial accidents where, more often than not, a greater portion of the injured person's medical expenses are paid either as health plan benefits or under the Workers' Compensation system. Furthermore in the industrial cases, substantial payments are common for wages lost due to an on-the-job accident. However,

because of the collateral source rule, the defendant manufacturer may not raise the issue of collateral source payments. The effects of eliminating this rule are obvious; if the "collateral source rule" did not exist the defendant could demonstrate that the plaintiff has been compensated for some portion of his direct economic loss resulting from the accident. Undoubtedly, the jury's knowledge of collateral source payment would tend to reduce that component of the settlement for economic losses. What effect the rule change would have on the pain and suffering or punitive components is not clear.

Another example of a tort reform is the statute of repose, sometimes incorrectly called statute of limitation. Under a statute of repose, an accident must occur within a specified length of time after the product was manufactured or placed into service in order that a claim be valid. If the accident occurs after the statute has "run out" a liability tort action may not be initiated.

The last category of changes, the no-fault situation, would result in major systemic changes in the means and methods of settling damage and injury claims resulting from accidents involving products. The intent for the implementation of a no-fault procedure would be to eliminate a significant percentage of product accident torts.

In the case of workplace accidents, the Workers' Compensation system, which is an existing accident no-fault relationship between the employee and the employer, would be extended to cover the relationships between the injured employee and the manufacturer of the involved equipment. For consumer accidents, several variations have

been offered in lieu of tort. Of these, the most well-known are those put forth by O'Connell which are discussed in the next chapter.

Toward a Solution

One must bear in mind that in the "call for action," the Executive Branch acted through the bureaucracy in defining the issue, and, in making the recommendations. This is considered the normal role for the bureaucracy. Now, the responsibility for further action shifts and falls on the Legislative Branch, namely, the Congress. This shift requires that Congress act in its usual manner by reflecting the important political interests involved. Some "band-aid" bills have already been introduced on a national basis. For example, the Luger Bill would allow a "statute of repose" as a protection in torts for a manufacturer of capital goods and equipment. Many examples of Tort Reform activity have been present at the state level.¹²

The timing of serious Congressional action on Products Liability considering the enormous problems of this Session (Energy, Inflation, Foreign Trade, Middle East, DeTenté, SALT) indicate that the in-depth treatment of the Product Liability issue will not take place in 1977-78 Session but can be seriously undertaken in the 1979-80 Session. Recent articles have also indicated some trouble in Congress as to which Committee as jurisdiction of the issue; at least four committees claim involvement at this time.¹³

FOOTNOTES--CHAPTER II

¹The finest compilation of articles on the principle of laws is Product Liability: Law Practice, Science, edited by Rheingold and Birnbaum, 1975. The U.S. Department of Commerce Studies are also good.

²For those readers who desire a brief review of the principles and terms, the following list is provided. These definitions are not intended to be legalistically exhaustive but are accurate as stated:

Absolute liability: the seller of a product is liable in tort, without proof of defect or negligent manufacture for human injuries and property damage caused in the use of that product. Operative in no-fault proposals usually with limitation to economic loss only.

Abnormal use: is a sometimes accepted defense in Product Liability torts. A manufacturer is not liable when the plaintiff's injury results from an abnormal use of the product. See duty to warn.

Collateral source: a rule of evidence in product liability tort trials whereby a defendant is prohibited from introducing or seeking information regarding reparation received by the plaintiff from other sources for the same injury. These sources are usually Workers' Compensation, unemployment compensation, health insurance or first-party insurance.

Contingency fee: is a method of payment of the plaintiff's attorneys fee. Collectable only if the plaintiff is successful. Usually 33 percent of award.

Contributory negligence: a sometimes accepted defense if the defendant can show that the plaintiff's own negligence is the sole proximate cause of the accident. In rare cases, the principle has been successfully used to mitigate damages.

Defect: a condition contained in a product which causes a breach of warranty either expressed or implied.

Expressed warranty: an affirmation or promise made by the seller to the buyer relating to the product and used as a basis of the bargain.

HenningsonHenningson v. Bloomfield Motors Inc.--32 N.J. 358, 161 A.

2d. 69 (1960): case established principle of strict liability (see Strict Liability). Chrysler sold an automobile to Bloomfield Motors who sold it to Mr. Henningson. His wife was injured in an accident caused by a faulty steering mechanism. Chrysler and Bloomfield were joint tortfeasors. Plaintiff prevailed without proving negligence or establishing privity.

Hold harmless clause: sales contract provision whereby the buyer agrees to accept liability for injury or damages caused by product. Commonly used in machine tool sales. Concept has not been fully tested in all states.

Implied warranty: sometimes called "merchantability" this principle stipulated that the goods are fit for the ordinary purposes for which the goods are used.

McPhersonMcPherson v. Buick Motor Co. 217 N.Y. 382, 111, N.E. 1050

(1916): landmark decision--Plaintiff proved negligence in manufacture of automobile which caused injury. Defendant manufacturer was held liable for damages in absence of privity.

No-fault: in Product Liability, no-fault assumes conditions of absolute liability for manufacturer.

Privity: contractual relationship; existence of contract between two parties.

Restatement (2nd) of Torts 402A: Published by American Law Institute 1959; established liability without negligence or privity

"§ 402A. Special Liability of Seller of Product for Physical Harm to User or Consumer

1. One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user, or to his property if,
 - a. the seller is engaged in the business of selling such a product, and
 - b. it is expected to and does reach the user or consumer without substantial changed in the condition in which it is sold
2. The rule stated in Subsection 1 applies although

- a. the seller has exercised all possible care in the preparation and sale of his product, and
- b. the user or consumer has not bought the product from or entered into any contractual relation with the seller"

Statute of limitation: principle used to eliminate stale damage claims by requiring commencement of legal action within a reasonable length of time after occurrence. In Product Liability, sometimes incorrectly used as statute of repose.

Statute of repose: a proposed legal defense which would allow tort only if accident occurred within a limited and specified time after product was first sold.

Strict liability: establishes manufacturer liability for injuries and damages caused by defective products without negligence or privity. See Restatement (2d) of Torts 402A.

Subrogation of claims: in Product Liability, a Workers' Compensation carrier can sue the equipment manufacturer under strict liability for reparation paid on injured worker.

Winterbottom
Winterbottom v. Wright (1842): English case involving injury to passengers caused by defective carriage wheel. Court found that privity was necessary for tort. Concept overturned by McPherson (1916).

³See Chapter IV for computation.

⁴For clarity, the following definition will be used when discussing workplace injuries:

The manufacturer manufactures the allegedly defective product.

The employer employs the injured worker.

Thus, in any given case, the manufacturer is not the employer even though the employer may be engaged in any or all phases of business such as manufacturing, distribution or retailing but not in the manufacture of the actual product allegedly causing the injury.

⁵See: Other Issues in Chapter IV.

⁶Commerce, HEW, HUD, Justice, Labor, Transportation, Treasury.

⁷Mostly Trade Association Surveys.

⁸The principal difference is jurisdictional which is based upon the physical location of the plaintiff (injured party), and the defendant (manufacturer).

⁹Federal Register, Vol. 43, No. 67, Thursday, April 6, 1978, pp. 14612-14631.

¹⁰Ibid., p. 14624.

¹¹Proposed Tort Remedies--Basic Standard of Responsibility
in Products Liability Cases
State of the Art Defense
Compliance with Safety Standards
Regulation of Expert Testimony
Statute of Repose
Useful Life Limitation
Establishment of Misuse Defense
Comparative Fault
Attorneys Fees
Limitation on Pain and Suffering
Punitive Damages
Modification of Collateral Source
Rule
Periodic Payments
Indemnity and Contribution
Hold Harmless Clauses
Prohibition of Subrogation by
Workers' Compensation Carriers
Arbitration

Proposed Financial Modifications--
Mandatory Product Liability Insurance
Unsatisfied Judgment Funds
Assigned Risk Plans
Joint Underwriting Association
Last Resort Funds
Federal Insurance
Federal Re-Insurance
Federal Chartered Insurance
Captive Insurance Companies

¹²See Business Insurance, June 26, 1978, p. 36.

¹³Small Business, Commerce, Judiciary, Labor.

CHAPTER III

DESCRIPTION OF CERTAIN NO-FAULT PROPOSALS IN PRODUCT LIABILITY

Timing and Research

Because of the complexity of the issue and the dozens of proposal solutions, a conscious decision had to be made to limit the research to only certain no-fault areas. Admittedly this judgment to examine only systemic no-fault changes was influenced by the existence of usable data and the availability of other suitable research and information as well as the recommendation by ITFPL to study no-fault. Furthermore, the research was also felt to be potentially very useful to those policy makers sorting out the various interests at this time.

Continuing on the aspects of timing, the bureaucracy, because of the limitations of its role, has made statements of fact based upon available and supportable data. Only in a very limited sense, is the bureaucracy permitted to make conjectural comments and extensions. Playing the "what if" game and fabricating extrapolations is an artform reserved principally for the Congress, and its Committee staffs and the involved interest groups.

Thus, during this hiatus between Executive and Congressional action, it is highly desirable that some objective research be conducted which could estimate the costs and benefits of the most

significant well-known systemic changes as described in the Executive Branch reports. Moreover, this research should include not only the aggregate of all costs and benefits but also the profile of costs and benefits as they impact the actors in the revised system. Stated differently, where and on whom do the benefits fall and who pays? Several distinct classes of participants are identified. These latter points are matters of public policy.

Although much has been written about no-fault by many knowledgeable authors, a few comments must be included conceptualizing Product Liability no-fault. Unlike the treatment of the historical development in the previous chapter, the conceptual background of no-fault remedies must be detailed. An understanding of no-fault is absolutely necessary because it is fraught with rhetorical argument, uneven and incomplete comparisons. To write a truly objective analysis of product liability was rather difficult up until now because the nature of the discussion tended to reduce itself to conjectural premises. Hopefully the display of numbers later will add some of this hitherto absent objectivity.

Underlying Principles of No-Fault

O'Connell succinctly described the underlying rationale for no-fault:

The theory of no-fault is that average claim cost can be cut by eliminating payment for (1) arguing over fault and the value of pain and suffering, (2) pain and suffering itself, and losses already paid by collateral sources such as health insurance and sick leave.¹

The ITFPL Final Report listed six indicia which are common to almost all proposed no-fault plans.² To place these in the proper public policy and product liability framework, they are presented here rewritten with comment in a public policy framework which illuminates the interdependencies among the parties.

The six common characteristics of no-fault plans:

1. Person injured by a no-fault warranted product acquires the property right with complete certainty for damages incurred regardless of the fault assignment.

This characteristic is crucial in that it establishes the concept of absolute liability whereby the claimant need not provide the required legal proofs of strict liability; namely, proof of material defect or negligent manufacture. The proximate cause of the accident need not be a factor. The strength of this point is it provides for the removal of the need and lottery aspects of litigation to establish a presence of a defect or negligent manufacture. The litigation process can be complicated, complex and costly for all parties to the action.

However, the proximate cause concept is a weakness. Here the question is: "Did the product cause the accident or was the accident an act of God?" All manner of bizarre examples have been put forth in the literatures depicting the need for positive controls on the product/accident relationship. O'Connell handles this by having the manufacturer stipulate, in his expressed warranty statement, that no-fault recovery applies only to certain specified accidents.

It must be pointed out that the laws of most states would have to be modified in order to allow these warranty provisions, which raises another complex problem.

2. The injured person loses his right to prevent disclosure of his collateral source payments.

Under the tort/fault system, an injured party need not reveal nor may the defendant seek or bring forth evidence of economic loss recovery payments from other sources such as Workers' Compensation, health insurance, sick leave, etc. Under no-fault, in an effort to control costs of claims, these payments must be taken into account during the computation of economic loss.

3. If the claimant elects the no-fault option, he gives up his right to sue for pain and suffering under tort.

Again this element is added in an attempt to control some of the costs of no-fault. The emotionalism of the juries and the deep pocket theory³ have jointly contributed to many of the extraordinarily large judgments. By removing much of the emotion from the process, supposedly the judgment could be reduced. The claimant trades his right for quick and complete payment of his direct economic losses for the payment he would be entitled to for the discomfort he suffered as a result of the accident.

4. Injured parties selecting no-fault recovery would acquire the right to all out-of-pocket medical payments as well as the right to lost earnings or at least a portion thereof up to the limit established in the product warranty.

In a similar manner, the claimant by the choice of no-fault would acquire full recovery of all his medical expenses without resort to tort. The no-fault insurer would again cover only those payments in excess of collateral source recoveries.

Lost earnings provisions present a much tougher problem. A fixed percentage of lost wages up to a fixed limit is a commonly discussed criterion. O'Connell uses all lost wages up to \$200/week. Clearly for many consumer accidents this would not be a sufficient amount for the involved parties.

Two difficult problems briefly bear mentioning here. First, how are future earnings computed? It is extremely difficult for no-fault conditions to project the future earnings potential (or loss of it) in the computation of earnings loss. Ignoring this question, which is brought out in tort actions constitutes, to this author, an extremely serious defect. Second, if inflation is to be taken into account then some mechanism or government agency, either state or federal, must be formed to make adjustments to or establish different levels of earnings payments.

Another observation is the issue of separating the measurement of pain and suffering damages from potential or future earnings. Even under the conditions of disclosure and examination provided by the tort ritual making the decision is hard. It is not seen where the no-fault process would necessarily improve on the decisions.

5. Injured party electing no-fault recovery would lose the right to sue under tort.

This statement is obvious and straightforward. However, the opposite is not always so under some proposals. Some proponents would allow minimum no-fault recoveries coupled with some tort rights under very special circumstances. These are minor and are considered exceptions.

6. The claimant has the right to choose either tort or no-fault recovery.

The statement in ITFPL report was significantly re-interpreted to the above. This researcher sees the choice entirely optional for the claimant since he may sue under tort for any amount of pain and suffering and proceed via tort regardless of any artificial limit established by the warranty. It is highly doubtful that the \$500,000 offset limit on pain and suffering would be allowed by the courts because it simply says that the first \$500,000 is really not recoverable by the plaintiff but only the excess. The idea of keeping that information from the jury in the process of tort is not logical. Courts do not like "funny money" judgments in the form of artificial adjustments.

Consumer vs. Worker No-Fault

An important distinction must be made between those products related accidents based upon status of the injured party at the occurrence of the accident. In this study, two kinds will be used: consumer, which means the party involved in the occurrence was not "employed and at work" at the time of the injury. O'Connell prefers the "off-the-job" description and the legal community prefers the "non-occupational" wording. Workplace injuries where the injured

party is "employed and at work" are worker cases. The choice of terms used herein is consistent with the ITFPL usage.

Types of No-Fault

There are five major no-fault plans now being proposed or in various stages of implementation:

- I. Third Party No-Fault
- II. Workers' Compensation
- III. First Party No-Fault Insurance
- IV. New Zealand Accident Compensation Plan
- V. Australian Social Insurance Plan

O'Connell summarized these nicely; furthermore he ranked them in the above order "according to the degree to which they explicitly use tort liability dollars to pay no-fault insurance benefits."⁴ The order given above is his, meaning that he estimates that the I. Third Party No-Fault and II. Workers' Compensation rely relatively more than the others on the savings in litigation and elimination of pain and suffering payments to cover a substantial portion of no-fault payments.

I. Brief Synopsis of Third Party Consumer No-Fault Remedies

There are two versions of Third Party Consumer No-Fault insurance plans commonly discussed. They are termed "elective" since they involve both optional self-immunization by a manufacturer and the option of the injured to choose no-fault or tort recovery.

- A. O'Connell Elective Third Party No-Fault Proposal was outlined in his book, Ending Insult to Injury. Admittedly

this is only a very condensed treatment of a very complicated proposal. Its major provisions are:

1. The manufacturer is permitted self-immunization from full tort liability for his specified products.
Immunity is established through warranty.
2. In exchange for immunity, the manufacturer accepts limited and qualified "Absolute Liability" for specific accidents occurring through the use of firm's products. Limits can include a maximum amount per incident.

3. Reparations for damages include:

--all medical expenses

--all lost wages up to \$200/233 for indefinite time;
less 15 percent if payments are adjudged tax free
by courts; less wages earned or "potential" wages

Note (a) all payments would only be in excess of reparations received from collateral sources by injured party such as sick pay, health insurance benefits, workers' compensation, unemployment compensation.

Note (b) all payments are made as losses occur and specifically not before. (Actually a variation of periodic payments remedy.)

4. Reparations specifically exclude recovery for pain and suffering.

5. Consumer has right:

--to sue under tort law

--to out-of-court settlements

- B. Freedman Elective No-Fault proposed by Mr. Walter Freedman, a New York Attorney. Its major provisions are:

1. The manufacturer, via warranty, provides the injured party the option of tort relief or limited no-fault reparations.
2. The manufacturer selects two limits under no-fault:
 - a. limit of total reparations for "foreseeable injuries." Total includes medical expenses and temporary wage loss but no payments for pain and suffering.
 - b. total limit allowed under no-fault, \$500,000.
3. The injured party then has the following options:
 - a. quick and complete reparation for small claims, i.e. less than \$5,000.
 - b. pain and suffering claims involving disfigurement, dismemberment or permanent disability can be handled under no-fault to limit of \$500,000 but conflict and assessment of amount is handled through binding arbitration
 - c. tort action unrestricted to size, and extent of injury and payment.

II. Brief Synopsis of Workers' Compensation No-Fault

- A. This proposal recommends that the existing Workers' Compensation coverage be extended and become the sole remedy to workers injured in workplace accidents regardless of all other conditions or circumstances. This means the enhanced system would automatically cover all product related accidents.

Another variant was proposed by O'Connell which would extend Workers' Compensation of an employee to his/her family. Thus, if a spouse or dependent was injured in any sort of an accident, the Workers' Compensation would cover the economic losses. Critics in private conversations with the author, have called this variant proposal a thinly veiled attempt at national social insurance.

Under the existing Workers' Compensation system, the injured worker usually receives his medical expenses and limited compensation for lost time, retraining and some miscellaneous expenses through a private or a state administered Workers' Compensation program. In accidents involving allegedly defective equipment, the same worker can often obtain additional relief from the manufacturer of that defective equipment through the tort system. This proposed remedy would eliminate direct tort relief for the worker by prohibited actions against the equipment manufacturer.

B. Implementation Requirements or Assumptions:

As in most systemic changes, it is often politically necessary that some "quid pro quo" be negotiated in order to establish the necessary benefit for the parties involved. Such is the case with this remedy. Therefore, following are several assumptions which were felt necessary for implementation.

1. It is assumed national legislation would be enacted specifically prohibiting an injured worker from obtaining relief via the tort system for injury received at the workplace.
2. It is assumed that certain important modifications must be made on the existing Workers' Compensation system. These are:
 - a. install a National Workers' Compensation system which will either be federally or state-administered or mixed. A minimum national system would establish and assure a consistent minimum level of benefits. The present operation of OSHA establishes a precedent for this type of system.
 - b. a general upgrading and standardization of benefits as recommended in the National Report on States Workers' Compensation Laws--1972, or to the Federal Employee Standards Act (FECA). The key provision here will be "fair and equitable" income protection under conditions of total disability and certain forms of partial permanent disability.

III. Brief Synopsis First Party No-Fault Insurance

- A. In this proposal, a citizen would purchase insurance from a carrier which would provide for economic losses caused by any serious injury, not only product related injury. A variant by O'Connell would promote the use of

first party coverage as a fringe benefit in the package supplied by an employer.

Major provisions are:

1. purchase of the insurance by private persons from private companies.
2. coverage would be similar to no-fault auto insurance.

A disturbing aspect about first person coverage is that personal disability and accident medical insurance have been available as long as this author can remember. Perhaps the "great social and individual need"⁵ mentioned by O'Connell has not yet manifested itself in the marketplace. Usually in a market society these needs can and are met at a price; such does not appear to be the case here.

IV. Brief Synopsis of New Zealand Accident Compensation Plan

A. Its major provisions are:

1. In effect since 1974, the plan covers all personal injuries:
 - a. automobile
 - b. workplace
 - c. product
2. Benefits paid by the plan include:
 - a. full medical payments
 - b. scheduled lump sum payments for body part loss or disfigurement
 - c. 80 percent of lost wages for indefinite term

3. The program financed by a combination of:
 - a. driver's license tax
 - b. tax on wages, 25 cents to five dollars per \$100 wages based on injury rate within industry or job classification
 - c. General Fund taxation to cover non-auto and non-workplace accidents

V. Brief Synopsis of Australian Social Health Plan

A. This plan is in the proposal stage only but represents a comprehensive national compensation plan for all accidents and has been extended also for illness.

1. The plan covers all accidents regardless of cause; that is
 - a. all automobile accidents
 - b. all product accidents
 - c. all workplace accidents
 - d. all others

Coverage is also extended to those with illness

2. Benefits are paid by a government social insurance department
3. The program would be financed by
 - a. 2 percent tax on all wages and salaries
 - b. 10 cents/gallon tax on gasoline
 - c. general revenues
4. Tort actions would be eliminated in
 - a. automobile accidents

- b. product accidents
- c. workplace accidents

Summary

This chapter was in no way intended to put forth the comprehensive rhetorical arguments for or against no-fault but merely to expose the top of the no-fault mountain as it relates to product liability. It was important to set the stage for the numerical analysis.

This author felt that O'Connell's assertions regarding (1) his theory of no-fault, and, (2) that his proposals use tort dollars to reduce no-fault expense, deserve testing. Thus the testing of this proposition and the extent of tort dollar savings is the essence of Chapter V. Tested in Chapter V will be the first two plans, as ranked by O'Connell, namely third party elective no-fault and Workers' Compensation as sole remedy.

FOOTNOTES--CHAPTER III

¹O'Connell, "Transferring Injured Victims Tort Rights To No-Fault Insurers: New Sole Remedy Approaches to Cure Liability Ills," University of Illinois Law Reform, Vol. 1977, No. 4, pp. 749-809.

²ITFPL Final Report, VII-203, et seq. Since these are short, the reader may wish to compare them with the text. They are:

- "1. Person injured by a product which was protected by a system would have a right to recover damages regardless of their fault.
2. The collateral source rule, to some extent will not apply.
3. Recovery for pain and suffering is abolished.
4. Persons injured by products would recover at least their out-of-pocket medical costs. They would also recover their actual loss of earnings or a percentage thereof.
5. Persons entitled to benefits from the system would, at least to the extent of the system's protection, be barred from suit against the manufacturer of the product.
6. Tort litigation system returns when damages reach a certain level or when an injury of a certain type occurs."

³Briefly "deep pocket" term describes a tendency of the juries to assess accident costs to those with the most resources, usually the insurance companies and the defendant manufacturers. It can also mean the tendency of claims to accrue to the largest entity in the stream of commerce. Here again, this is usually the manufacturer.

⁴O'Connell, p. 783.

⁵Ibid., p. 785.

PART II

ANALYSES

CHAPTER IV

THE 1976 PRODUCT LIABILITY SYSTEM-- EXISTING TORT SYSTEM

Goal of the Analysis

As stated in the previous chapters, the ultimate goals of this analysis are two-fold. The first and most obvious is to measure the size of the present system and then compare its size and scope to similar insurance systems in the U.S. The comparisons and impacts of its smaller identifiable components on a monoline basis can be offered. Once the present model is defined, one can make adjustments coupled with assumptions which will allow a testing of the savings of a no-fault system when it is imposed in lieu of the existing system; this is the second goal. Furthermore, the impact of these changes, fault-to-no-fault, can be estimated for the participants. It is obvious that these functions must be performed serially. They were calculated thusly and presented in that order. Chapter IV addresses the size question and Chapter V the no-fault comparisons.

Funds Flow

The concept of "funds flow" means the measurement of the transfer of monies between the parties in the system. It could also be called "transaction amounts" but it was felt that "funds flow" was more descriptive. This transfer transaction therefore, again by

definition, must occur within the confines of the system and can be considered as a derivation of the total cost concept. The concept of total cost is avoided herein because there is no easy answer to what should be included in a total cost analysis. Oftentimes certain ancillary benefits and losses which may be one or two steps removed from the primary actors are felt by analysts necessary for inclusion. In order to avoid that argument, only the identifiable and thus measurable flows are used in this model.

A simple example may reveal some of the difficulties in a "total cost" treatment. How would a researcher measure or even estimate the secondary benefit to a family of a successful claimant who received an enormous award for his/her pain and suffering? One must admit that real benefits may spill over to the family, but estimates of these flows and their significance are largely conjectural.

Other areas ignored in the funds flow analysis are those losses incurred by the plaintiff's attorneys who lose trials. These lawyers receive no fee whatsoever if their agreement with the claimant was for contingency fee payment only. Also losses may accrue to the plaintiffs' attorney if the attorney's pro-rated portion of the settlement, whether determined by claimant agreement or court judgment, was less than the amount necessary to cover the attorney's expenses. In other words, the attorney's portion of the settlement was too small to cover his expenses. Both of these situations are not covered in this model.

It is felt that the "funds flow" concept does not restrict the analysis but may, on the contrary, enhance it for several reasons. It provides a pattern for future analysis in that it emphasizes only the measurable transactions and would permit a consistent means of year-to-year comparison. Also, it identifies and employs the most relevant flows among the most relevant actors.

Actors

Who are the principal performers on this stage? Included are only those who participate in a funds flow transaction and then only those who are the obvious cost bearers or benefactors of the systems operations. Even though the actors were listed in a previous chapter, they are listed again here with an in-depth description of their role, slightly legalized. Moreover, certain qualifying or limiting characteristics are also mentioned.

Claimant

A legal person who has allegedly suffered or experienced damages as a result of a defective or a negligently manufactured product. The damages experienced can be of these types: Bodily Injury (BI), which are injuries to the claimant's human body or mental faculties; Property Damage (PD) which is damage to the personal or real property owned by the claimant; and Combined (Co) which involves both bodily injury and property damage occurring in the same incident.

Defendant

A defendant in a product liability action is usually the manufacturer of defectively or negligently manufactured product. Defendants can also be those parties who are part of the stream of commerce, such as wholesalers, distributors, dealers, jobbers or brokers who have had a role in the sale or merchandising the product. Since the percentage of both bodily injury claims and property damage claims involving members of the non-manufacturing community is relatively small (about 13 percent),¹ the data are treated as impacting only the manufacturing sector for the purposes of this study.

Consumer

The consumer is a claimant who experienced damages in the use of a product in an "off-the-job" situation. Of course it is not necessary that the product be owned or operated by the consumer. All that is necessary is that the person injured was not at work and was injured as the result of a defective or negligently manufactured product.

Worker

This party is a claimant who experienced personal injury or property damage in the use of a product in an "on-the-job" circumstance. It shall be assumed that the worker is covered by Workers' Compensation in the state which the accident occurred. It should be noted that there are exemptions, although usually minor in nature,

in every state which permits a small percentage of workers to work without Workers' Compensation coverage.

Legal Community

This group is comprised of the various counsel to (1) the claimants, (2) insurance carriers, and (3) the defendants in the action. Not included are members of the judiciary and the in-house attorneys of the carriers.

Insurance Carriers

This group consists of those companies or combinations of brokers and underwriters which are capable of furnishing insurance to clients. The expenses generally included under this heading are: (1) the administrative expense in which is buried in-house counsel costs, (2) brokerage fees, and (3) underwriting profits.

Time Period

The choice of the year for this study was dictated by data constraints. The only year with available data was 1976, calendar year. The model was constructed such that it estimated the total transactions for one full calendar year, making it compatible with normal industry reporting practices.

Data Sources

A limited amount of primary data and information was employed in the model.² These data gathered via personal conversations, consisted of certain most important ratios and subtle working relationships existent in the insurance sector. Even though small in

number, they were essential to the model. Among the sources are (a) the consultants hired by the United States Department of Commerce, (b) members of the executive staff of the ITFPL, (c) Chairman of the Consumer's Product Safety Commission, (d) staffs of several Chambers of Commerce at the state and local levels, (e) Michigan Manufacturers' Association, (f) executives in the insurance and legal community, (g) several key members and committee chairmen of the Michigan Governor's Task Force on Product Liability, and (h) others.

Although only a small quantity of hard data was furnished from the above parties, it contributed significantly to the understanding of the problem. Furthermore, the discussions had the beneficial effect of keeping the model's development within the boundaries of common sense and realism.

Most of the base tables with their numbers were obtained from secondary sources, which means the data were collected, organized and disseminated by responsible organizations. The major contributors were the series of reports issued by the United States Department of Commerce and the Insurance Services Office.

The Commerce Department report is the 12 volume study which includes:

- Briefing Report, ITFPL, December, 1976
- Product Liability, ITFPL, Industry Study Vols. I-II April, 1977 (hereafter called Gordon Report)
- Product Liability, ITFPL, Insurance Study Vol. I, January, 1977
- Product Liability, ITFPL, Legal Study Vol. I-VII, January, 1977

- Product Liability; Final Report, ITFPL, October, 1977

In addition to the above, Commerce furnished magnetic tapes containing the raw data used in the Gordon Report. The data were used to generate the ancilliary analysis on the differential impact of claims and damages on companies of differing size and on specific industrial sectors which will be presented later in this chapter.

The secondary data source absolutely crucial to the model was the Insurance Services Office, Product Liability Closed Claim Survey (ISO) published in late 1977. It was the first major survey taken over the range of the entire industrial sector in the United States. The ISO study was constructed roughly as follows. Twenty-three major insurance companies and groups were asked to participate by furnishing certain data on their PL closed claims which were officially closed, internal to their companies between July 1, 1976 and March 15, 1977, a period of eight and a half months.³ An assessment of the contribution of these 23 made in the property casualty area was made using 1975 industry information.⁴ These 23 in "premiums earned" account for more than 50 percent of all property and casualty insurance in the United States. This percentage infers substantial coverage of the product liability area.

As part of the ISO Survey, the carriers submitted detailed reports on each claim regardless of size or outcome. Ultimately, the cross classifications and aggregations were performed by ISO. Over 24,000 claims were reported in all various classifications and categories. Even when split into relatively small subcategories, these smaller sample categories still provided data for a large

number of claims. In other words, subcategory samples usually numbered in the thousands, thus can still be considered large by most standards.

As stated in their Introduction, ISO made it clear that their duty was to tabulate and present the data, and not to arrive at specific conclusions based on their data. By doing this, ISO maintained their role as a statistical service bureau for the industry. One can fully appreciate their requirement for retaining a neutral posture. Their role is quite similar to that of the Census Bureau, USDC in that both Census and ISO collect, summarize and publish these data but both usually do not offer comments on the data except regarding its accuracy.

Use of Trended Data

Trended data were necessary also in that the closed claim activity was used to estimate the "losses incurred," which has two components in any given premium year, namely, losses paid and losses reported but not paid. The latter component means that there is a carry-over of claims between premium years. Since this study needs losses incurred to estimate system size but operates only on paid claims in a given premium year, it was required to take into account the effect of inflation on the carry-over claims. Trended data does that exactly. For a detailed treatment of the calculation, see Footnote 12.

The tables in the ISO survey were assembled in two different ways denoted by ISO as "Trended" and "Untrended" data. ISO stated:

"It is necessary to convert all statistics to reflect a common occurrence year in order to make valid comparisons and interpretations of the data."⁵ This author accepted ISO's statement. Thus, in the trended reports, economic adjustments were made to recognize the "inflationary influences on cost levels."⁶ Therefore, most data were factored to July 1, 1976 from the date of actual occurrence.

It must be made clear also that no adjustment was made by ISO on the frequency of claims. Thus, the frequency is only a snapshot of those claims actually closed during the period July 1, 1976 and March 15, 1977. The estimate of total claims in 1976 was made separately by this author as part of the model.

Dollar level adjustments were made on: (1) claims paid on the basis of CPI changes over the period involved; (2) medical expenses based upon the medical component of the CPI, (3) wage losses based on the Wage Level Index published by BLS; (4) adjustments were made similarly with other costs.⁷

The economic loss data were provided to ISO by the carriers for both Bodily Injury and Property Damage claims. The choice of claims' loss level must be recognized as being largely judgmental, acknowledging the severe difficulty in estimating economic losses. For example, in a BI action, it is often necessary to determine the claimant's future earnings losses, taking into account the claimant's age, skills and guesses as to the claimant's potential development. Not only are each of these judgments tough but nothing is known to this author about the degree of consistency or uniformity of the estimating techniques across the insurance industry. Because of

these built-in uncertainties, fine distinctions were not made when those distinctions were based on economic loss data. This is especially true in the calculation of the "coverage ratio" described in the following paragraphs. Moreover, it will be seen later that none of the conclusions depend on such a fine comparison.

Key to General Assumptions

Not only is the ISO survey crucial to this model, but the accuracy of that data is likewise crucial. Thus arises one of the difficulties in employing secondary data, the sample was not drawn randomly from the available universe but was an enumeration of about one-half the claims activity based solely on the sum of participating companies activity relative to the insurance sector universe. It will be admitted that a random sample of 24,000 + claims would have been preferable to the given enumeration but its sheer size supports its usefulness in the model.

The breadth and scope of the data was most impressive under close scrutiny. ISO did check the data for input accuracy and media transfer. These checks show up in the "unknown" categories within each table. It appears that the data contains as much internal consistency as can be gained by computer editing. Of course, it must be remembered that the accuracy of the data is determined by the hundreds of clerical persons of the participating carriers who had to search the files, extract the required material and transpose the data into useable form.

The next key assumption was the estimated annual claims frequency for 1976. Some "less than responsible" individuals had been claiming that the claims frequency was exploding and would reach one million per year in the very near future. It seems to be true that there had been some claims filed increases which were shown in the Gordon Report. However, a 10 percent annual increase cannot be called an explosion. Thus, the ISO figure of 24,452 claims closed was simply factored up to a full year's claims activity as follows: since July 1, 1976 through March 15, 1977 is an eight and a half month period and the 23 participating carriers represent approximately 50 percent of the overall property and casualty activity, and the assumed product liability activity is:

$\frac{12}{8\frac{1}{2}}$	x	$\frac{1}{.50}$	x	24,452	=	<u>69,041</u> Claims closed
Period adjustment in months		Industry Size Adjustment		Claims Reported		For full year 1976 (Rounded to 70,000)

An important general assumption is that the ratios computed from the ISO tables can be applied to the full range of 70,000 claims. This is largely taken on faith and the argument goes back to the previous statement, "is the data truly representative of the activity." In order to avoid long discussions and unnecessary rhetoric, this author has simply assumed these ratios are acceptable for this analysis.

Little useful direct data were available on the legal expenses incurred by the claimants. Not only is this scarcity a problem for this analysis, but it has always plagued similar studies which have

a significant amount of multi-party legal involvement. The fees, payments, and agreements are private matters between the attorney and his client. The professional ethics of the legal community do not require that the transactions, either individually or in the aggregate, be made available for public review. An indirect method of estimating these expenses was employed based on the rationale that our legal system establishes a forum which is supposedly equal in the protection of the rights of the involved parties. This indirect method assumes the one additional step that this equality of rights protection probably generates approximately equal costs to the parties. Therefore, it is assumed that the plaintiff legal expenses are equal to the outside legal expense of the carriers as calculated in the Allocated Loss Adjustment Expense.

Analysis

The general approach in any cost/benefit analysis is to disaggregate the data then reaggregate it into appropriate categories for comparative purposes. Such a procedure was used here. Furthermore, keep in mind that the first part is a trended summary of estimated claims activity in 1976 is under the existing fault/tort system.

The technique used could be called a "modified tree with sub-category cross tabulation." What this means exactly is better shown in tabular form.

The schema for the computation of the existing system in 1976 is shown in Table 1. The procedure begins in Level I with the

Table 1.--Computational Schema Existing Systems.

Level	Description	Detail
I	Claims	Number of Claims
II	Payments	1. Claims with Payment a. number b. dollars 2. Claims without Payment a. number b. dollars
III	Type of Damage	1. Bodily Injury a. number b. dollars 2. Property Damage a. number b. dollars 3. Combined BI and PD a. number b. dollars
IV	Funds Flow	1. Payments to Claimants a. Gross payments to claimants b. Plaintiff legal expense c. Claimant net after legal expense 2. Allocated Loss Adjustment Expense a. Legal Expense b. Other Expense 3. Manufacturers Payments in Excess of Coverage 4. Manufacturers Legal Expense 5. Economic Losses a. Total Economic Losses b. Payments over Economic Loss c. Payments under Economic Loss d. Payments equal Economic Loss
V	Consumer/Worker	1. Payments to Claimants 2. ALAE 3. Manufacturers Payments in Excess of Coverage 4. Plaintiff Legal Expenses 5. Economic Losses
VI	Source and Distribution of Funds--Summary	1. Consumer/Worker 2. Legal Community 3. Insurance Companies 4. Manufacturers

estimated figure of 70,000 for the whole of 1976 Closed Claim Activity. Please remember that the 70,000 closed claims has little immediate relationship to claims initiated in 1976.

In Level II, the total number of claims were broken into "Claims with Payment" both in number and dollars and "Claims without Payment," again both in number and dollars.

It must be noted that throughout every level of computation various ratios obtained from the ISO study were used. The method of calculating and the reference to the specific ratio are included in Appendix B. Oftentimes, it was necessary to take "with some faith" the applicability of a given ratio across a level or two. This must be acknowledged as softness in the calculations. However, without these extensions the estimates could not be made at all.

A simple example will illustrate the difficulty in the multi-level use of ratios. The available data for computing "Allocated Loss Adjustment Expense" (ALAE) was listed for "Type of Damage" only, that is for either Bodily Injury or Property Damage. A breakdown of ALAE specifically between Consumer and Worker categories was not done by ISO. However, for consumers and workers, the ratio of dollars of "Paid Claims" did exist. For BI, the dollars paid to Consumers was 58 percent, to workers 42 percent. Thus, the assumption was made that BI ALAE expenses could be separated as a ratio of claim dollars paid ($.58/.42$). The alternative method considered was the use of a unit ALAE cost per claim. However, this was rejected because of the considerable difference in the average claim size between workers and consumers. It seemed that outside claims

processing costs would be more closely related to the size of dollars in the transaction than on the number of claims.

In Level III, the claims were further separated into the three basic types of damage incurred by a claimant, namely, BI, PD and Combined. Then these several aggregates were broken down further into the various funds flows listed in detail. Here an extremely important conversion was made: the separation of funds flow detail into the Consumer/Worker categories. As stated above, the ratio used was that of relative dollar activity in Consumer/Worker claims rather than by the number of claims. This seemed much more logical since there is a large relative difference in size of claims and aggregate dollars. This is shown in Level V.

The Source and Distribution of Funds (VI) could then be estimated from the various pieces and then recombined into the accounts of the aforementioned actors.

In order to have some method of comparison or measurement which could be consistent across the boundary of Consumer/Worker and also between the fault-tort/no-fault systems, a new measurement instrument, the coverage ratio, was developed. Thus, after computing the "Net Payment to Claimants," this figure is divided by the estimated economic loss of that group of claimants. It provides some measure of the relative effectiveness of the system's coverage of the group of claimants' aggregated losses. It must be noted and emphasized that there are severe dislocations present under the aggregated categories of claimants in that some are highly overpaid and some are not paid or underpaid. Since the unit claims data

were not available to this researcher, the extent of the phenomenon could not be studied. It would be useful as further study to develop several profiles with the unit claims to determine the various characteristics of the claimant vs. the degree of dislocation. Much of this dislocation is caused by the relatively large number of claims which ultimately end up without payment, about one-third. Such a high percentage suggests a large number of frivolous or nuisance claims flow through the system.

Bodily Injury Claims

Bodily Injury claims are summarized in Table 2. This type of claim constitutes the largest category of the three major types of damage. Of the 42,000 + claims, only 29,000 receive any payment whatsoever. But these 28,930 claims generated a gross payment to the successful claimants of over \$400 million. The coverage ratio is 1.02. However, it must be pointed out that the coverage ratio of the paid claimants is much greater than 1.02; it is about 1.50. This somewhat supports the suggestion of Product Liability system serves as a lottery for some of the participants. Thus, the winners collect 150 percent of losses but the losers collect nothing, that is a coverage ratio equal to zero. It must be recalled that these payments greater than economic losses are for pain and suffering and/or punitive damages.

Property Damage Closed Claims are treated in Table 3. It was somewhat surprising that the number of Property Damage claims was so large. With 37.1 percent of the claims, PD accounts for

Table 2.--Bodily Injury Claims Existing System--1976, Trended Data--
\$(000).

	Claims w/Payment	Claims w/o Payment	Total
I BI Claims	28,930	13,490	42,420
II Gross Payments to Claimants	\$402,445	-0-	\$402,420
Plaintiff Legal	78,748	\$ 2,226	80,974
Claimant Net	\$323,697	(-) \$ 2,226	\$321,471*
III ALAE	\$ 94,253	\$ 42,102	\$136,355
ALAE--Legal	78,748	35,176	113,924
ALAE--Other	15,505	6,926	22,431
IV Mfgs. Payments Excess of Coverage	\$ 12,017	-0-	\$ 12,017
V Mfgs. Legal Expense	\$ 3,937	\$ 1,759	\$ 5,696
VI Economic Loss Total	\$209,672	\$ 106,099	\$315,772*
Payments > Economic Loss	\$309,738	-0-	\$300,738
Payments < Economic Loss	\$107,945	\$ 106,099	\$214,044

Coverage Ratio = 1.02

Average Paid Claim (net) \$11,189

* Used in Coverage Ratio.

Table 3.--Property Damage Claims Existing System--1976, Trended
Data--\$(000).

	Claims w/Payment	Claims w/o Payment	Total
I PD Claims	17,664	8,236	25,900
II Gross Payments to Claimants	\$ 67,088	\$ -0-	\$ 67,088
Plaintiff Legal	19,506	823	20,239
Claimant Net	47,582	(-) 823	46,759*
III ALAE	\$ 23,058	\$ 7,692	\$ 30,750
ALAE--Legal	19,506	6,507	26,013
ALAE--Other	3,552	1,185	4,737
IV Mfgs. Payment in Excess of Coverage	\$ 8,366	-0-	\$ 8,366
V Mfgs. Legal Expense	\$ 975	\$ 325	\$ 1,300
VI Economic Loss Total	\$120,019	\$62,626	\$192,645*
Payments > Economic Loss	\$ 15,289	-0-	\$ 15,289
Payments < Economic Loss	\$ 78,321	\$62,626	\$122,338

Coverage Ratio = 24.2%

Average Paid Claim (Net) \$2693.

Total Claims--70,000

Total Property Damage Claims--25,900 (37.1%)

* Used in Coverage Ratio.

25,900 claims in total. The calculation of claimant payments, ALAE and the two manufacturers line items was rather routine and provide no difficulty. The truly shocking figure was the coverage ratio at 24.2 percent which means that less than a quarter of the aggregate losses are covered by claimant net. A lower coverage ratio for PD claims had been anticipated for two reasons: (1) the amount of the damages are easily fixed; the assignment of monetary damage for an article is a great deal simpler than attempting to project a BI injured claimant's wage losses over the remainder of his life, (2) pain and suffering and the emotionalism related to the awards are not present.

By far the smallest "Type of Damage" category is the Combined BI and PD cases shown in Table 4. Only 1,680 claims are involved, but logically the changes for a PL accident simultaneously injuring a person as well as causing significant property damage is rare. It is conjectured that most in this grouping are auto and auto parts related. At .987, the coverage ratio is in roughly the same range as the BI claims, probably because the BI portion of the claims dominates the category.

Types of Damage

The construction of Tables 2, 3 and 4 has allowed the aggregation of certain like figures for ease in analysis and comment. Due to the similarity between BI claims and the Combined claims, the impact on the claimant account was summarized in Table 5. It must be remembered that these claims include all consumer bodily injury

Table 4.--Combined Claims Existing System--1976, Trended Data--\$(000).

	Claims w/Payment	Claims w/o Payment	Total
I Combined Claims	1,146	534	1,680
II Gross Payments to Claimants	\$18,118	-0-	\$18,118
Plaintiff Legal	3,545	534	4,079
Claimant Net	14,573 (-)	534	14,039*
III ALAE	\$ 4,243	\$1,667	\$ 5,910
ALAE--Legal	3,545	1,393	4,938
ALAE--Other	698	274	972
IV Mfgs. Payment in Excess Coverage	\$ 541	-0-	\$ 541
V Mfgs. Legal Expense	\$ 177	\$ 70	\$ 247
VI Economic Loss Total	\$ 9,474	\$4,742	\$14,216*
Payments > Economic Loss	\$13,539	-0-	\$13,539
Payments < Economic Loss	\$ 4,894	\$4,742	\$ 9,636

Coverage Ratio = .987%

Average Paid Claim (Net) = \$12,716

Total Claims--70,000

Total Combined Claims--1,680 (2.4%)

* Used for Coverage Ratio

Table 5.--Analysis of BI and Combined Claimant Account, Trended Data--\$(000).

	Dollars	Percent
Sum of Gross Payments	\$420,563	100
Sum of Plaintiff Legal	- 85,053	20.2
Net to Claimants	\$335,510	79.8
TOTAL Economic Loss	\$329,988	
<u>Claimant Net</u> <u>Total Loss</u> = <u>101.7%</u>		

accidents as well as the workers on-the-job personal injuries. Furthermore, recall that estimates of collateral source offset payments are not yet included in the system. The sum of gross payments was \$420 million, less the plaintiffs' legal expenses of \$85 million, giving a net to the claimants (as a group) of \$335 million to cover an estimated total economic loss of \$330 million.

One could reason that, in those BI and Combined Claim accidents which resulted in no payment, either insufficient evidence existed to prove a defective or negligently manufactured product involvement in, or, causing the accident. Or perhaps the claims were nuisance claims or frivolously conceived. Stated differently, there does seem to exist a strong mechanism which controls the number of paid claims.

On the other end of the BI spectrum, there seems to be a considerable amount for pain and suffering and punitive payments in

the "paid" cases. On claims paid, the ratio is 1.54 which means that for every dollar of economic loss, 54 cents was added for pain and suffering or punitive payment over the entire range of claims. This 54 cents fuels the argument about pain and suffering or punitive payments and their underlying rationale.

A closer look at the Property Damage payments gives a much different picture. See Table 6 for a listing of the relevant data. The gross payment for PD amounts to only approximately 15 percent of the Gross BI payments in accordance with the ISO ratios, so that PD in a sheer size comparison is considerably smaller than BI. Besides being smaller, property damage PL actions also obviously lack the strong emotional involvement of the BI case.

Table 6.--Analysis of PD Claimant Account, Trended Data--\$(000).

	Dollars	Percent
Gross Payment	\$ 67,088	69.9
Plaintiff Legal	- 20,239	30.1
Net to Claimants	\$ 46,849	
TOTAL Economic Loss	\$192,645	
 <u>Claimant Net</u> <u>Total Loss</u> = 24.3%		

The computation of the plaintiff legal expense on the PD cases should also be more fully explained. The ISO tables for

ALAE-PD were computed on a percentage basis where the figures available for ALAE were expressed as a percentage of the aggregate claims. This percentage was considerably higher for PD than BI. In other words, it seems the ALAE was more expensive per dollar of claim for PD than BI. This may be due to large differences in average claim size, i.e., a large fixed cost component of ALAE in claims processing, but the exact reasons are not known. Since the legal portion of ALAE was used to estimate the plaintiff legal expense, it has carried through to a large plaintiff legal expense in this category.

The surprising number in the PD claims is the coverage ratio of 24.3 percent. This means that the system provides, in total, for PD losses less than a quarter of the total economic losses for the claimants as a group. The coverage improves only slightly if the PD-Paid Claims are used, where the coverage ratio becomes approximately 37.6 percent.⁹ A couple of reasons which can be conjectured for this situation are: (1) that the claimants have a tougher job of establishing the proof of accident in which the product defect was the proximate cause, and (2) perhaps the courts and the juries approach PD/PL cases more on a "laissez faire" or "caveat emptor" basis than they do the BI cases. If an upper level of the adjudication process, here the trial court system has established, for whatever reasons, an accustomed or somewhat predictable set of outcomes on a certain type of case, these predictable actions significantly influence the movements of the actors jockeying below that level of activity. Although the concept is thought to be related to common legal precedent, one might term it "systemic precedence."

One more interpretation can be offered: maybe the courts simply do not look favorably on the small PD/PL case.

A composite of both the BI and PD claims has been provided in Table 7 because it shows the key numbers of the aggregated claimant account for the entire system. Little comment will be offered because unfortunately these data tend to mask rather than reveal important relationships necessary for the understanding of the system.

Table 7.--Analysis of Aggregate Claimant Account, Total System--1976, Trended Data--\$(000).

	Dollars	Percent
Sum of Gross Payments	\$487,651	100
Sum of Plaintiff Legal	105,292	21.6
Net to Claimants	\$382,359	78.4
TOTAL Economic Loss	\$504,024	

$$\frac{\text{Claimant Net}}{\text{Total Loss}} = 75.9\%$$

Consumer/Worker

Essential to this research is the computation (or splitting) of the aggregated claims and dollars of funds flow into the components of the Workers and Consumers. Because the two sub-systems have markedly differing characteristics and operating criteria, they must be separated to permit any kind of a definitive analysis.

Again, using the ISO ratios across a couple of levels of computation the separation was accomplished.

One of the important judgmental assumptions which this researcher faced was the choice of which ratio to employ when disaggregating the individual line item. Most often, the criteria of total dollar claims activity was used rather than the number of claims. It is admitted that the rationale behind this choice is very limited. It was thought that gross dollar activity was more relevant, in the aggregate, than the number of individual claims. The result with this approach has been to keep the average gross payment of consumer and worker claims proportional to the amounts published in the ISO text, thus maintaining internal consistency. Table 8 has the line item detail on this breakdown.

The first notable and interesting portion of this table is the profile of claim numbers between consumer/worker and Paid/Not-Paid. The sheer preponderance of consumer claims is immediately evident with 62,500 claims compared to about 7,500 worker actions. Moreover, a significant portion of each result in "Claims without Payment."

When making the deductions of the aggregate claims impacting the judicial system, a guess can be offered on the amount of these cases which end up on the court dockets and what percentage actually end up in a trial. The number here is rather small. Only 4.8 percent BI cases end up in a trial and 3.4 percent of PD end in trial.¹⁰ One can hardly take the position that these few cases have burdensome effect on our existing general tort system.

Table 8.--Consumer/Worker Claims Existing System--1976, Trended Data--\$(000).

	Consumer	Worker	Total
Gross Payments to Claimants	\$309,565	\$178,086	\$487,651
Plaintiff, Legal	69,244	36,049	105,292
Claimants' Net	240,321	142,037	382,358
ALAE	\$122,791	\$ 60,224	\$183,015
ALAE--Legal	94,558	50,318	144,876
ALAE--Other	28,233	9,906	38,139
Mfgs. Payments in Excess of Coverage	\$ 15,607	\$ 5,047	\$ 10,654
Mfgs. Legal Expense	\$ 4,728	\$ 2,516	\$ 4,979
Economic Loss Total	\$364,292	\$139,732	\$504,024
Payments > Economic Loss	\$196,487	\$133,080	\$329,567
Payments < Economic Loss	\$251,302	\$ 94,807	\$346,109
Average Paid Claim (Net)	\$ 5,914	\$ 28,071	\$ 8,009
Total Claims--70,000			
Consumer Claims w/Payment--42,680			
Consumer Claims w/o Payment--19,900			
Worker Claims w/Payment--5,060			
Worker Claims w/o Payment--2,360			

The listing of the various line items is rather straightforward since it is presented in the same format as the "Types of

Damages" Table. The maintaining of the average gross payments per claim between Consumer and Worker forces the distribution of "Gross Payments to Claimant" separation. From this emanates the remainder of the line items.

Trend Flow

The goal of this chapter was to reach the light at the end of the tunnel which contains three important parts:

1. Sources and Distribution of Funds for Consumer Claims 1976
2. Sources and Distribution of Funds for Worker Claims 1976, and
3. An Estimate of Total Funds Flow for the System

In the review of previous analyses, by other authors, legal and ALAE were usually compared to the gross claimant payments. The usual type of comment offered is "for every dollar received by the claimant, the lawyer gets x cents." Here not only are these comparisons possible but also comparisons relative to the whole system. This was felt to be particularly useful since the funds flow through the insurance company sector in PL is large and, thusly should be flagged even if done roughly. The assumption necessary to include the insurance sector is to estimate a loss ratio factor. A conservative loss ratio (LR) factor of .50 was chosen.^{11,12}

For both Consumer and Worker Claims with the LR estimated, the insurance sector administration and overhead costs were figured, thereby allowing an estimate of the total manufacturing premium for both consumer and worker claims. Please recall when examining

Tables 9 and 10 that (a) manufacturers' premium, (b) insurance company distribution and then (c) the total industry figures are dependent upon the choice of loss ratio.

The insurance company costs are largely assumed in the choice of the LR but are nevertheless estimated to be substantial at \$432 million for Consumers Product Premiums and at \$238 million for Workplace Product Premiums. The remainder of the line items are shown in a normal Source and Distribution, Row and Column matrix.

On the consumer side, the source of funds are the manufacturers premium payments in the magnitude of \$885 million (trended) (Table 9) which were distributed to the

-Claimants	\$252M	28.5%
-Legal Community	\$172M	19.4%
-Insurance Community	\$416M	52.1%

To provide a comparison compatible with other authors' analyses, for every dollar gross received by the claimant slightly over 22 cents was passed to the plaintiffs' lawyers. A particularly interesting comparison can be made by calculating the total dollars paid to the legal community as a percentage of claimant net or 68 percent. However, the countervailing argument is the \$172M represents the legal expenses necessary to protect the rights of all parties in the action, the manufacturers, carriers, as well as the claimants.

Thus, the cost of legal expenses 19.4 percent represents the total expense for the rights protection of all parties in the system.

Table 9.--Source and Distribution of Funds Consumer Claims--Existing System, 1976, Trended Data--\$(000).

Source	Distribution			
	Claimant	Legal	Insurance Company	
I. Mfgs. Premium Written \$864,712*				
Loss Ratio	\$432,356*	-0-	-0-	\$432,356*
ALAE	\$122,791	-0-	\$ 94,558	28,233 (pass thru)
Claims Paid	\$309,565	\$240,321	69,244	-0-
II. Mfgr. Payment in Excess of Coverage				
	\$ 15,607	\$ 12,116	\$ 3,491	-0-
III. Mfgr. Legal Expense				
	\$ 4,728	-0-	\$ 4,728	-0-
	\$885,047	\$252,437	\$172,021	\$460,589
	100%	28.5%	19.4%	52.1%
Claimant Coverage Ratio = $\frac{\text{Net Claimant}}{\text{Total Loss}} = \frac{\$252}{\$364} = 69.2\%$				
Average Paid Claim (Net) \$5631				

*Loss Ratio of 50 percent assumed.

Table 10.--Source and Distribution of Funds Workers' Claims--Existing System, 1976, Trended Data--\$(000).

Source	Distribution			
		Claimant	Legal	Insurance Company
I. Mfgs. Premiums Written \$403,915*				
Loss Ratio	\$165,605*	-0-	-0-	\$165,605*
ALAE	60,224	-0-	\$ 50,318	9,906
Claims Paid	178,086	\$142,037	\$ 36,049	(pass thru) -0-
II. Mfgr. Payment in Excess of Coverage				
	\$ 5,047	\$ 4,025	\$ 1,022	-0-
III. Mfgr. Legal Expense				
	\$ 2,516	-0-	\$ 2,516	-0-
	\$411,478	\$146,062	\$ 89,905	\$175,511
	100%	35.5%	21.8%	42.7%

Claimant Coverage Ratio = 104.5%

* Loss Ratio of 59 percent assumed.

The coverage ratio for consumer claimants is also shown to be 69.2 percent.

On the workplace side, the format of Table 10 was identical to the consumer format. The assumption of the loss ratio was slightly different, reflecting a loss ratio of .59 published for Workers' Compensation coverage in 1976. Of the \$401M in total manufacturing premiums, the distribution is spread as follows:

-Claimants	\$146M	35.5%
-Legal Community	\$ 90M	21.8%
-Insurance Community	\$175M	42.7%

The ratio of legal fees to worker net is marginally less than for consumer at 62 percent. But again, the statement can be made that for 18.5 percent of the total funds flow in the system the rights of all participants are legally protected.

The coverage ratio on worker accidents is noted to be much more favorable to the worker at 104.5 percent of economic losses than the consumer ratio of 69.5 percent. Because the workplace accidents are almost entirely BI injuries, the ratios are high for the reasons stipulated under the BI section.

Total Funds Flow

One last most important point, the Total Funds Flow must be viewed as an indication of the overall size of the system and its size reflects the potential impact on the economy of the United States. Table 11 shows the total funds flow to be \$1.37B (est.). Since the sales in 1976 of the entire U.S. manufacturing sector was

Table 11.--Total Funds Flow Existing System--1976, Trended Data--
\$(000).

Type	Dollars
Consumer Claims	\$ 885,047
Workers Claims	484,183
TOTAL	\$1,369,230

NOTE: A crude estimate of untrended aggregate was run using the ratio of \$ Claims Paid untrended to trended. Untrended Total Funds Flow is estimated at \$.59 Billion.

\$1,178B, the PL total funds flow are about 0.1 percent of sales. This percentage does not support the hypothesis that the PL issue severely threatens the health and makeup of the industrial sector. However, as stated earlier, there appears to be intense but nevertheless specific industrial sub-sectors which have been and are being differently affected by the PL issue. Why then so much exaggerated rhetoric? One can only guess. Perhaps a major cause could have been adverse publicity and a number of "unfair" and unusually large judgments which have caused the insurance companies to overreact. By overreacting is meant a crash program by carriers to cover anticipated losses either by minimizing risks (cancellations) or rate increases. This caused the carriers to raise rates or cancel coverage for firms with only limited PL claim activity. This latter "accusation" is merely a guess but should be considered as an area of further study.

Another comparison is appropriate here. The size of PL (trended) is roughly the same as medical malpractice. In PL, as with medical malpractice, there was a great hue and cry on the premiums rise and its threat to the medical industry and health care in general. But after a couple of years of maturing and growing sophistication, the medical sector is coping with the problem. Shifts occurred but the dislocations in that system dampened over time and settled at different but higher levels. This occurrence may not be bad either for medical malpractice or product liability.

Existing System--Summary of Findings

The most valid analysis of the product liability system requires disaggregation of the system into various small pieces. Only then can the workings of the system be understood. When viewed as a total entity, it tends to mask many of the internal characteristics. Examination of the differences in coverage ratios between BI and PD, and between consumer and worker claims show this. In the cases of BI claims and worker claims, the claims payment, when viewed in the aggregate, are very favorable to the claimants. Consumer claims are less so. Property damage claims payments seem to be downright unfavorable to the claimants.

One must note that the insurance industry controls a large proportion of the PL premiums, however, this acquisition of the funds for administration and the furnishing of insurance, along with the necessary stability for its financial structure is assumed to be compatible with other insurance lines. Finally, the Total Funds Flow

is small when viewed on a macro-basis. Unless the PL system markedly accelerates both in the size and number of claims, the system should not represent a threat to the economy. It is probable that PL will follow the same path as medical malpractice.

Firm Size and Sectoral Impacts

In the military, there is an expression which describes the situation when a strike force comprised of either aircraft or naval vessels, when returning from a mission, comes across the enemy. This enemy is called "target of opportunity." In this research, two targets crossed the path which require a more detailed treatment than that which could be provided in an expanded footnote. These targets have considerable relevance to this small business and certain segments of the industrial base. The first refers to the existence of certain reasonably identifiable sectoral impacts of product liability, i.e., what products are involved in the most serious claims. The second deals with the size of firm attracted by a PL claim, i.e., is the "deep pocket" theory valid. The "deep pocket" concept means that a claim will tend to be made against the largest, in terms of assets or size, member of the sales chain. It is usually the manufacturer or perhaps even a large retailer.

The ISO study contained much data on the sectoral impacts by showing the product involved in the most serious claims. A few of these tables will be highlighted here.

By far, the product line with the most claims is food. Nearly 56 percent of all BI claims dealt with food. However, these

56 percent of paid claims were responsible for less than 2 percent of total claims paid. Boxed and bagged food lead the food items, followed by meat products; then came beverages and cakes. These four groups alone accounted for 38 percent of all PL claims. Obviously, the average claim size for Food BI claims is very small (about \$500) compared to the overall average.

Even though it must be admitted that this rather large number of claims must generate an enormous amount of nuisance administrative expense, the lack of serious large claims does not place the food sector under much pressure from the issue.

The truly serious claims are listed in the ISO tables as "Products Generating Most Payment Dollars." Here the product categories were ranked in order of total dollar paid claims. Automobile and auto parts lead the list with 7.8 percent of all paid BI dollars and 10.8 percent of all PD dollars. If all auto related topics in the top 20 of each listing are totalled, the automobile related products and services are responsible for 15.4 percent of all BI payments and 18.2 percent of all PD payments. Stated slightly differently, over \$1 of \$6 in paid damages comes from the automotive sector. The number and seriousness of claims are high.

The second largest generator of BI payments are prescription drugs with 7.2 percent of all claim payment dollars. Here again both the number and average payment for claims are rather high. Beyond these two sectors the very next two are "Valves" and Miscellaneous Machines with 6.3 percent of all BI dollars. It is likely

that these accidents were primarily workplace accidents involving industrial equipment.

The most striking characteristic about these three sectors: autos, drugs and workplace, is that each is already a highly regulated and governmentally supervised industry. The National Highway Safety Administration has dictated safety conditions for the automobile manufacturer for years. The FDA actually supervises and approves drug testing and the releases to the market. And OSHA has set tough and enforceable standards for workplace safety.

This condition brings out a good "chicken and the egg" argument. Are the industries accident prone because they are regulated? Or are they regulated because they are accident prone? Obviously, this is an area suitable for additional study.

The Gordon Report surveyed 373 firms in a carefully selected stratified sample, randomly selected within a given industry. The stratification was "by size;" large, medium and small firms. The selection, within each size, was determined by the manufacturer of a specific product. However, each firm then reported: (1) on the specific product and (2) on all products manufactured. These latter data provided this researcher a tenuous but somewhat broader look at claims activity and firm sizes. Table 12 contains the reworking of the Gordon data which are quite interesting.

In "Claims Pending" which means the number of active PL claims at the time of the survey, note that the figures are all of the same general magnitude as are the "New Claims" filed during the year. The claims activity does not support the "deep pocket" theory.

Table 12.--Claims Activity and Firm Size.

Firm Size	No.	'76 Sales Average (\$M)	Claims Pending	New Claims*	Total Damages* Sought	Damages Sought* New Claims
Large	109	\$681.0	.69	.38	\$.01	\$.006
Medium	112	\$ 33.2	1.07	.413	\$.04	\$.005
Small	100	\$ 1.4	.56	.49	\$.0015	\$.003

* Per \$10,000,000 Sales.

However, the situation for damages sought by "Claims Pending" and "New Claims" is markedly different. The medium and large firms are handling claims from 80 percent to 700 percent larger than the small firms. This "Damages Sought" category tends to support the "deep pocket" theory. Here again it seems to be another area fruitful for further study.

FOOTNOTES--CHAPTER IV

¹ISO, p. 30.

²That is gathered by this researcher.

³ISO, p. 135.

⁴It should be noted that product liability insurance, at least through 1980, is included as a portion of either "Commercial Multiple Peril" and Miscellaneous Liability lines.

⁵ISO did note that one company did not submit data on closed claims which had a payout of \$1,000 or less. The extent of this adjustment had to be ignored.

⁶ISO, p. 8.

⁷ISO, Appendix C.

⁸USDC, Industry Report, pp. IV-47.

$$\frac{\$47.6}{\$130} = .376$$

¹⁰ISO, p. 95.

¹¹The choice of a loss ratio factor of .50 is much more complicated than it appears in the text. It must be recognized that it has been constructed from a set of assumptions:

(1) The generally accepted expression for computation of the loss ratio is

$$\text{Loss Ratio} = \frac{\text{Losses Incurred} + \text{ALAE}}{\text{Premiums Earned}}$$

where "losses incurred" is the sum of losses paid and provisions for losses reported but not paid.

(2) The first assumption revolves around the computation of "losses incurred." It can be argued that during a discreet time period, i.e., 1976, there are: (1) claims which have been carried over from the previous year, and (2) claims reported and paid within a given year, and (3) some claims which are reported in a given year but are not paid until a later year. The industry handles this situation by adjusting their loss reserve accounts over the three

periods. Thus, the key assumptions are that the carry over passed to the later year and the reserve level is retained; therefore paid claims equal losses incurred. This assumption is significantly strengthened since trended data are used throughout which, by design, take into account the inflationary influence on the claims.

(3) The ratio of "premiums written" to "premiums earned" in 1976 for CMP and Miscellaneous Liability is 1.069 and 1.066; in percentages these represent adjustments of 6.9 percent and 6.6 percent respectively. The adjustment to convert "written" to "earned" was the average--6.75 percent.

(4) The industry ratio of CMP (stock) underwriting expense to premiums written in 1976 was 32.8 percent.

(5) Thus, applying these factors allows an estimate of distribution of the insurance funds: \$ = 000,000

\$865 Premiums written

\$ 58 Difference between "premiums written" and "earned"
(6.75 percent)

\$807 Premiums earned

\$284 Underwriting expense (32.8 percent):

Commissions \$158

Other \$126

\$309 Claims payments (from text)

\$122 ALAE (from text)

\$ 92 Underwriting profits

(6) Percentages were obtained from Best's Aggregates and Averages--1977.

¹²Strictly speaking, the loss ratio of the above distribution would be:

$$LR = \frac{\text{Losses incurred} + \text{ALAE}}{\text{Premium Earned}} = \frac{\$309 + \$122}{\$807} = .53$$

It must be acknowledged that several loss ratios from Best's were available for comparison. In 1976, they ranged from 61.2 percent cumulative underwriting experience--stock (Best's, p. 141) to 47.2 percent for largest ten mutual groups (Best's, p. 27) for CMP. In Miscellaneous Liability, the variation was even greater.

The ratio, namely the .50 based on "premiums written" or the .53 based on "premiums earned," was purposely chosen on the low side in order to strengthen the ultimate finding on size. In other words, the low LR, used here, probably tends to slightly overstate the overall system size.

CHAPTER V

THE 1976 PRODUCT LIABILITY SYSTEM AS MODIFIED BY--CONSUMER NO-FAULT-- WORKERS' COMPENSATION REMEDY

General

The approach in this chapter is much more a mixture of art and science than was the previous treatment of the existing system. Not only was it required to begin a no-fault analysis at the very ending point of the existing analysis, but it was further necessary to synthesize the provisions of a no-fault system to allow a similar treatment of the no-fault question.

The bulk of this chapter is devoted to a Consumer Elective No-Fault System and how the flow of funds are distributed. Thereafter, comments were possible, as well as comparisons with the funds flow of the existing system. These different analyses are essential to testing the underlying rationale of no-fault; that is, that much of the additional costs of operation a no-fault system can be covered from reduced legal and administrative costs.

The treatment of the Workers' Compensation as Sole Remedy for workplace accidents is cosmetic because the author found that a responsible study, the Gordon Report, contained a Congressional analysis of its relative financial impacts. This author's role then was to update that report and compare it to the previously

unavailable 1976 data on the current system. Since the size of the workers' compensation/product liability connection had not been previously estimated until Chapter IV, an analysis of the tradeoffs with those contained in the Gordon Report was hitherto not possible.

Consumer Elective No-Fault

As stated before, the principal academic proponent of Third Party Elective PL No-Fault is Jeffery O'Connell. The details of his proposals are contained in Ending Insult to Injury and major revisions are contained in his Illinois Law Forum publication "Transferring Injured Victim's Tort Rights to No-Fault Insurers, etc." Another elective no-fault suggestion was put forth by Walter Freedman which had some interesting wrinkles on the use of arbitration procedures and a mixture of tort and no-fault under differing conditions.

Since the data on the individual claims were not available to the author, the possibility of examining each claim with either the Freedman or O'Connell model did not exist. Only grouped data were available; the groupings were the ranges of claims by dollar size paid. Thus, the factors had to be applied to groupings of similarly sized paid claims and not to each individual claim.

To strengthen the analysis, the assumptions were formulated to test the underlying principle of no-fault in product liability. Even though the assumptions were as objective as possible, when a difficult choice arose, it probably was made to slightly favor no-fault.

Unlike the assumptions of a computer based model, these assumptions cannot be buried in the bowels of a 1,000 line Fortran model, but must hang out for all to see. Most of the operators and factors are shown in detail in Appendix C, but it is also important to describe them briefly in the text to facilitate understanding.

To emphasize the impact of no-fault, the first major assumption was that all small claims were to be handled via no-fault. It is assumed that the manufacturers found it advantageous to fully adopt elective no-fault for their products on small claims. A provision of both O'Connell's and Freedman's plan is also included, namely the tort action is optional for the claimant. Now the question arises: What is a small claim? Here the author differs sharply with O'Connell. O'Connell stated that elective no-fault should be employed in increments of \$10,000 or more. Frankly, the author cannot fathom a manufacturer who markets thousands of \$9.88 hand drills, accepting for each item the possibility of a \$10,000 liability under conditions approaching absolute liability. Even if the manufacturer sells high dollar, heavy industrial equipment, the reasonable tendency for him is to exercise the full measure of his legal protection which is to place the burden of proof on the plaintiff. To give no-fault favorable treatment, a boundary was chosen on groupings where the unit claim paid was greater than \$5,000 but less than \$10,000 on Claims Paid basis. Claims greater than boundary were handled via old system. How exactly this boundary was chosen is covered later.

The second major assumption relates to the number of additional claims which will be generated when the public realizes that conditions of absolute liability exist, whereby they have "a right" to compensation in a product accident regardless of the exact cause. The opponents of no-fault hammer away at this point probably with some justification since no-fault introduces a great deal of uncertainty on the number of additional claims. O'Connell's counter argument has merit when he suggests that the number of claims will be controlled since the elective no-fault provisions are tied to specific accidents and types of injury. Of course, there is no way short of total guesswork, of estimating additional claims. However, the ISO data gives this study an acceptable minimum quantity of additional claims. As stated before, about one-third of all claims initiated end up a "Claims w/o Payment." This means that the insurers, for whatever reason, do not pay or are not required to pay for the damages or any portion thereof of one claim in three. These 20,000 claims were initiated because of damages occurring to a claimant, with or without merit. The claimant believed the damages sufficiently extensive and product-connected to initiate a claim; and the carrier felt the claim was sufficiently important to open a file on the claim. So, this study operated on this relatively large number of claims to test the no-fault impact. No attempt was made to estimate the additional consumer claims beyond this minimum or their impact. Fortunately, the operation on the 20,000 claims provided suitable answers on the system's sensitivity to the additional claims problem.

The third major assumption relates to generation of ALAE legal expenses. In both automobile and medical malpractice suits, there are records produced either by the society, organization or institution involved recording the proceeding or the situation immediately subsequent to the accident. For example, in an auto accident, we establish on-the-scene reports of the policeman which is further substantiated by the physical evidence. Hospital and surgery records are maintained, as well as the names of witnesses for medical malpractice actions. In any legal proceeding, these records play an important role in the determination of facts. In consumer product liability cases, this record keeping does not necessarily exist; opponents of no-fault are quick to mention that this lack of legal substantiation will give rise to an excessive number of new claims which are not necessarily meritorious. To overcome this difficulty cleanly, it was felt that the lowest level of formal legal review would be appropriate in no-fault cases, namely that review provided by an Arbitration Hearing. This streamlined process besides being able to "establish the facts" of the action, is remarkably simple and cheap. Also, ISO had data on its costs relative to product liability cases.

The fourth assumption is the acceptance of O'Connell's suggestions for (1) deduction of collateral source payments from the economic loss experience before no-fault payments begin, and (2) elimination of payments for pain and suffering.

Summary of Assumptions

To summarize the key assumptions in our synthetic no-fault plan:

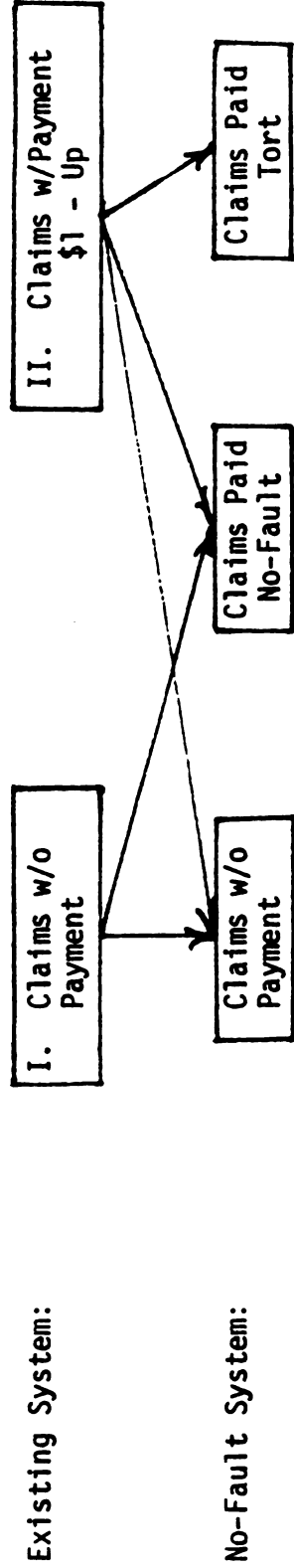
- Small claims only are to be handled through no-fault. Claims less than \$10,000 paid account for about 87 percent of all PL Consumer Claims.
- No-fault operations are performed on the previous 20,000 + claims which were not paid with the existing system. No estimate was made for additional claims initiated.
- A minimum formal legal process will be required, namely arbitration for the establishment of product/accident relationship to protect the rights of the manufacturer by screening out non-meritorious claims.
- Deduction of collateral source payments from economic losses.

Changes in Flows

Figure 1 depicts graphically the shifts in claims and dollars flows when no-fault is imposed. The two major categories of claims under the present tort system, "Claims Without Payment" and "Claims With Payment" need to be split in accordance with some criteria into categories under no-fault. The reasoning behind these shifts must be understood.

"Claims Without Payment" (tort) end up under no-fault in "Claims Without Payment (NF)" or "Claims Paid (NF)." The former of the NF categories will contain those cases which arrive there either due to lost tort litigation, or, by failure to pass the arbitration hearing, or, simply abandoned by the claimant after once initiated. Also included are those claims where the total economic losses of the claimant are covered by collateral source payments. The net result is no systemic payment to the claimant.

Changes in Flows: Claims and Dollars*



Definitions: Claims w/o Payment-NF include those cases in which economic losses are paid completely by collateral sources or no payment as a result dropped claims or lost trial.

Claims Paid-NF are cases which are paid with a combination of collateral sources and no-fault carrier payments.

Claims Paid-Tort include paid claims which involve only carrier payments.

*This Figure is applicable to the three types of damage claims: Bodily Injury, Property Damage and Combined.

Figure 1.--Consumer No-Fault System.

The next NF category, "Claims Paid (NF)" will acquire that portion of "Claims w/o Payment (Tort)" where the condition of absolute liability applies. It is assumed to contain those claims for which negligence of manufacturer or defect was hazy under tort system but not required under no-fault. The no-fault payments would be calculated roughly as follows: payment would equal the gross economic loss experienced, less the collateral source payments up to some point where net payment was greater than \$5,000 but less than \$10,000.

The disaggregation of "Claims with Payment (Tort)" is even more interesting because it is split three ways into: (1) "Claims Without Payment (NF)," (2) "Claims Paid (NF)" and (3) "Claims Paid Tort (NF)" under differing conditions. The first category collects those "Claims with Payments (Tort)" which were totally and completely paid by the collateral sources payment to the Claimant. "Claims Paid (NF)" contains those small claims with a net economic loss remaining after collateral sources payments. Lastly, all the larger claims are handled the same under no-fault as tort. The reader should note that the diagram is equally applicable to Bodily Injury, Property Damage and Combined Damage.

A particularly knotty problem arose in choosing the boundary point for the BI, PD or Combined claims spectrum in that claims data was aggregated by claims size. Thus, it was necessary to work with Ranges of claims data rather than with a continuous spectrum of individual claims. This became even murkier since the economic loss tables had to be converted from incidents to claims in all

these cases. Nevertheless, a boundary was established for stated reasons where all claims below that point were treated via no-fault and above via tort. See Figure 2.

Conversion Problem. Change existing System to No-Fault for Claims with Payment \$1 - Up.

Three Distinct Problems for BI, PD and Combined.

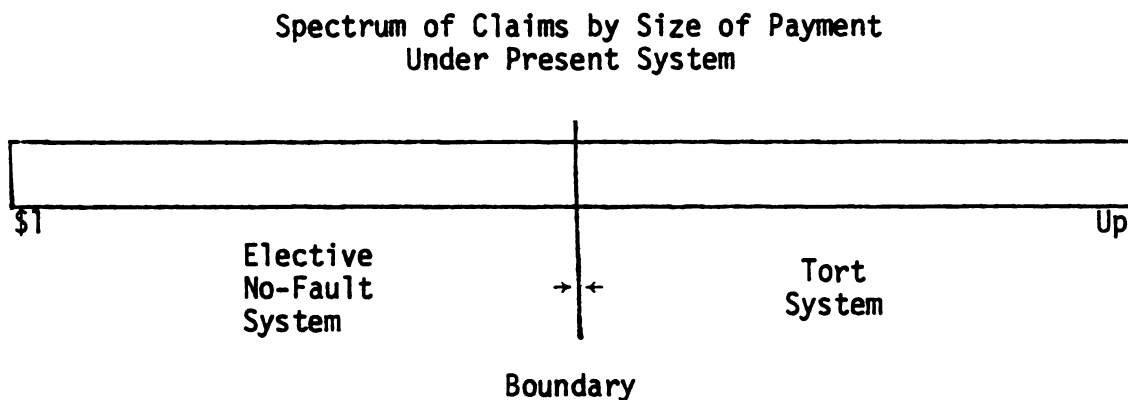


Figure 2.--Consumer No-Fault System.

The separation of "Claims Without Payment (Tort)" was an assumed distribution given in Table 13. A guess had to be made since no definitive data were available to suggest this separation. It was guessed that 10 percent of "Claims Without Payment (Tort)" would not be payable under no-fault. Restating this assumption, 90 percent of those "Claims without Payment (Tort)" would be tested for payment in the no-fault system.

Before discussing the payment and loss summaries, the treatment of collateral source payments must be explored. These offset payments are conceptually extremely important to O'Connell's position.

Table 13.--Separation of Claims w/o Payment Consumer--All Types, Summary.

Number of Claims	Bodily Injury	Property Damage	Combined	Total
Claims w/o Payment-- Present System	11,130	8,236	534	19,900
Estimated Paid w/NF	10,017	7,412	481	17,910
Estimated Not Paid w/NF	1,113	824	53	1,990

NOTE: Breakdown assumed.

Taking into account these payments eliminates the "double dipping" aspects of tort litigation when a claimant can be paid via two different systems for the same damage. As stated before, collateral payments cannot be mentioned as evidence in court under present law.

ISO has some percentages on the components of economic losses: wage losses predominate with 84 percent of all economic losses, followed by 14.3 percent for medical payments and 1.7 percent miscellaneous losses. The factors pertinent to the assumption that only one third of consumer wage losses are covered by collateral sources are: that this category does not contain lost wages due to industrial on-the-job accidents and that rather limited sick leave provisions are available for hourly or low wage workers. Medical losses are assumed more comfortably because information availability on national health insurance and the extent of coverage. Thus, based upon 75 percent of the population has some form of medical coverage, subtracting an allowance for deductibles gives an estimate of 50

percent or one half of the claims medical expense is paid by health insurance of some sort.

For property damage losses, the collateral source payments were assumed to cover 10 percent of the losses, making 90 percent eligible for no-fault payment. The 10 percent was thought to be provided by first party insurance, namely, personal property and auto collision.

The first summary calculated was the Payment and Loss Summary --Consumer Claims Without Payment (Tort)--All Types, Table 14. The total economic losses for the three types of damage total a whopping \$129 million dollars. The collateral source estimate, mentioned in the previous paragraph, would cover 23.1 percent or \$29.7 million of those losses, leaving \$75.6 million or 58.7 percent paid by no-fault. Over the entire spectrum and types of claims, the average no-fault payment is a relatively large \$4020/claim.

As in the earlier tables, the detailed view of the summary provides much more interest than the column sums. Surprising was the large (\$63 million) amount of PD Economic Losses for the 8,500 PD claims. In order to realistically limit the degree of no-fault payments for PD, the maximum allowable payment was held to \$5,000 per claim for 7,400 claims. The remainder of the excess loss over \$5,000/claims and that lost by the 10 percent also assumed "not paid" are shown under "Unindemnified Losses."

It is quite obvious that the size of the losses and the very large number of claims in previously "Not Paid" claims would have a significant financial impact on a no-fault system. The truly

Table 14.--No-Fault Payment and Loss Summary--Consumer Claims w/o
Payment (Tort)--All Types, Trended Data--\$(000,000).

	Bodily Injury	Property Damage*	Combined	Total	Percent
1. Total Economic Loss	\$61.5	\$62.6	\$4.7	\$128.8	100.0
2. Paid by Collateral Sources	\$21.8	\$ 6.3	\$1.6	\$ 29.7	23.1
a. Medical	4.4	-	.3	4.7	
b. Wages	17.2	-	1.3	18.5	
c. Other	.2	-	1.3	.2	
d. PD Misc.	-	6.3	-	6.3	
3. Paid by No-Fault Insurance	\$35.7	\$37.1	\$2.8	\$ 75.6	58.7
4. Unindemnified Losses	\$ 4.0	\$19.2	\$.3	\$ 23.5	18.2

* Assumed limited maximum payment of \$5,000/Claim by no-fault system.

surprising group of benefactors are not those with bodily injury claims but those with property damage claims.

Bear in mind a very important point made in this analysis by including "Claims Without Payment (Tort)" and the Ranges of Claims chosen on the following pages for BI, PD and Combined Paid Claims result in the testing of 87 percent of all Consumer Claims in the no-fault system. Only 13 percent of all claims, those being the larger ones, are treated under tort.

Now shifting to "Claims with Payment," "Consumer BI Claims with Payment," ranges were computed such that the claims grouping of ISO Table 5A were maintained for Range 1, Ranges 2, 3, 4, and

Ranges 5, 6, 7.¹ In order to significantly reduce an unusually complicated hand calculation, the ranges were aggregated and the computation done on the aggregates. This was felt satisfactory in that these ranges are very close in magnitude at the lower end.

Table 15 contains a Summary of Payment and Loss Survey for Consumer BI Claims by Range. Note carefully line 6: in every range category calculated, the claimants, on a gross basis, received less payment under no-fault through the no-fault system than under conditions of tort. This phenomenon is the expected response for the reduction of pain and suffering and collateral source offsets. In each of the ranges, there exists a greater number of claims for which the payment under the old system exceeds the economic losses experienced by the injured party. The qualifications and restructuring of our synthetic no-fault system limits payment to economic loss less collateral payments.

The result of this limitation is simply that many thousands of small BI Claimants are slightly less well indemnified under this no-fault system. This was predicted by O'Connell.

Providing a different problem was the choice of the suitable boundary between BI range groupings, especially since at all levels the "Payments Under Tort" far exceeded payments under no-fault. Quite arbitrarily, the boundary was placed between ranges 2, 3, 4, and ranges 5, 6, 7 because of an exceedingly sharp change in the ratio of Old Payments to No-Fault payments. In ranges 2, 3, 4 the ratio Old/NF was 1.29 which means that old payments exceeded no-fault by 29 percent; in ranges 5, 6, 7 that ratio becomes 3.25. A

Table 15.--No-Fault Payment and Loss Summary by Ranges, Consumer BI Claims w/Payment,
Trended Data--\$ = 000,000.

	Ranges									
	1	2,3,4	5,6,7	8	9	10				
1. (a) Claims Number	18,742	2,992	1,353	482	358	213				
(b) Total Economic Loss	\$1.993	\$7.464	\$10.91	\$6.593	\$6.219	\$1.579				
2. Paid by Collateral Sources	\$.706	\$2.646	\$ 3.868	\$2.334	\$2.202	\$.560				
(a) Medical	\$.143	\$.534	\$.783	\$.473	\$.446	\$.113				
(b) Wages	.557	2.088	3.052	1.843	1.739	.442				
(c) Other	.006	.024	.033	.018	.017	.005				
3. Paid by NF	\$1.281	\$2.855	\$ 1.490	\$1.445	\$1.465	\$.857				
4. Unindemnified Losses	-0-	\$1.963	\$ 5.552	\$2.814	\$2.552	.162				
5. Payments* via Tort System	\$2.660	\$3.693	\$ 5.240	\$2.030	\$2.225	\$1.988				
6. Payments* Lost Under NF	\$1.379	\$.838	\$ 3.750	\$3.470	\$3.690	\$2.845				
† Boundary										

* Gross to claimant.

225 percent loss in payments was considered a sufficient disincentive for the claimants in their opting for no-fault, and thus the bulk of these claimants would choose tort relief instead of NF. Furthermore, it would be hard for a policymaker to strongly advocate a system which provides for substantially diminished payments for the small BI claimants.

The point about the loss of benefits to the small BI claimant is of such importance that some explanation of the computational procedure behind it should be offered for a proper understanding and acceptance. Of the 18,742 BI claims in Range 1, with an average claim of \$141, there were 11,789 who received payments greater than stated losses. The amount of overpayment was \$1,342,000 or \$114 per claim. Only 1,574 claims received payment less than economic loss; amount of loss \$693,000. The remaining 5,379 claims were paid an amount equal to the losses incurred.²

Unlike the BI claims, the situation with Property Damage claims is much different, not in the number of claims, but in their distribution. The property damage claims are unusually underindemnified. Payments are much lower than the stated loss level of the accident. Therefore, with the availability of the no-fault option, coupled with only sparse collateral source payments, a huge potential for no-fault payments appears.

The PD summary (Table 16) shows calculations for PD claims payments in Ranges 1-7 where Ranges 2-5 were treated together as are Ranges 6 and 7.³ The results of the imposition of no-fault was remarkably different than under BI. In each grouping, no-fault

Table 16.--No-Fault Payment and Loss Summary by Ranges, Consumer PD Claims w/Payment, Trended Data--\$ = 000,000.

	Ranges		
	1	2,3,4,5	6,7
1. (a) Claims Number	12,153	3,197	871
(b) Total Economic Loss	\$2.63	\$9.11	\$6.22
2. Collateral Source Payments	\$.26	\$.91	\$.62
3. Paid by NF	\$2.37	\$7.77	\$5.20
4. Unindemnified Losses	\$.14	\$.43	\$.40
5. Payments* via Tort System	\$1.97	\$4.25	\$3.58
6. Payments* (gained) Lost Under NF	(\$.40)	(\$3.52)	(\$1.62)

*Gross to claimant.

payments exceeded substantially those paid with tort. By substantial is meant additional payments of \$1,100/claim in the grouping Range 2-5 and \$1,850/claim in Ranges 6-7. The underlying causes of these differences are:

1. a minimum of collateral source payments which would offset the economic loss--thus the no-fault system faces almost all of the direct loss,
2. the existing system, as shown in Chapter IV, does not react very favorably toward PD claims for reasons unknown. Thus no-fault would mean the conversion from a rather reluctant system to a responsive one on the handling of PD claims.

The boundary was chosen in PD between Ranges 6-7 and Range 8 due to the average economic loss/claim. In Range 6-7 that amounted

to over \$7,000/claim which was deemed to be at or beyond the limit which could be termed reasonably acceptable to manufacturers in no-fault.

The Combined Claims are minor by comparison, but are shown for completeness; the Survey was shown in Table 17. The Combined picture is rather similar to the BI and also had a boundary between Ranges 2-3-4 and Ranges 5-7. The sample size in this analysis is thought to be dangerously small.

Table 17.--No-Fault Payment and Loss Summary by Range, Consumer Combined Claims w/Payment, Trended Data--\$ = 000,000

	Ranges		
	1	2,3,4	5,6,7
1. (a) Claims Number	833	134	57
(b) Total Economic Losses	\$.121	\$.456	\$.666
2. Collateral Sources Payments	\$.043	\$.162	\$.236
3. Paid by NF	\$.078	\$.290	\$.091
4. Unindemnified Losses	-0-	\$.120	\$.339
5. Payments via Tort	\$.117	\$.519	\$.568
6. Payments Lost Under NF	\$.039	\$.229	\$.229

The synthetic No-Fault system would yield as gross payment to consumer claimants almost \$400 million. This was arrived at by adding the major claims categories:

1. Claims Not Paid Under Tort; Paid Under No-Fault

2. No-Fault Payment for Claims Previously Paid Under Tort

3. Payments Under Tort of Larger Claims

Immediately noticed in Table 18 is the \$75+ million for Claims Not Previously Paid. This figure dominates the table and the overall analysis. Changes, even though real and meaningful, occurring in the smaller BI and PD paid claims are nominal by comparison. It is true that small Paid BI Claimants under tort would be slightly less well off, but not to an arguably greater degree. Conversely, the small paid PD Claimant is much better off.

Table 18.--Summary, No-Fault Payments to Consumer Claimants,
Trended Data, \$ = 000,000.

	Type of Damage			
	BI	PD	Combined	Total
1. Claims Not Paid Under Tort; Paid--NF	\$35.7	\$37.1	\$2.8	\$75.6
2. Claims Not Paid--Either	-0-	-0-	-0-	-0-
3. NF Payment				
(a) Dollars	\$ 4.1	\$15.2	\$.4	\$19.7
(b) Ranges	1-4	1-7	1-4	
4. Tort Payment				
(a) Dollars	\$227.3	\$ 57.8	\$ 8.5	\$293.6
(b) Ranges	5-19	8-19	5-19	
	\$267.1	\$110.1	\$11.7	\$388.9
Comparison =				
Payment under NF	\$ 4.1	\$ 15.2	\$.4	\$ 19.7
Payment under Tort	\$ 6.4	\$ 8.2	\$.6	\$ 15.2
Ranges	1-4	1-7	1-4	

Note: Some Rounding Errors Present.

The whole no-fault system seems sensitive to claims not paid under tort but payable under no-fault. The magnitude of the \$75.6 million figure represents a 25 percent increase in the system's payments.

Many strong opponents of no-fault have argued that there exists no effective means to limit the exposure of unseen claims; thus, the liability faced by the manufacturers. This point becomes particularly acute when one recalls that no additional claims were added to the system for this analysis, but only the 20,000+ claims considered were those already in the system. Another view of the number of claimants better or worse off under NF is given in Table 19.

The other major account requiring extensive calculation was the Allocated Loss Adjustment Expense. To conduct this estimate, it was necessary to compute the ALAE for the BI, PD and Combined Claims for both those ranges covered by no-fault and add that to the residual ALAE left over from the tort portion of the system. Because of the assumption about the formal legal procedure as a minimum control mechanism utilized to control claims and establish fault, the savings of ALAE were not as great as expected. Note that the ALAE in PD was virtually equal in no-fault compared to tort (Table 20). This seems reasonable if one remembers that the no-fault legal system is monitoring \$43 million more in payments than tort.

Significant savings accrue in the Bodily Injury area (about \$20 million) largely because of the simplified legal handling of the thousands of the smaller BI claims.

Table 19.--Summary, No-Fault Consumer Claims With Payment, Better/Worse, Trended Data--\$ = 000,000.

	BI	PD	Combined	Total
1. (a) Claimants worse off w/NF	15,014	2,275	637	17,926
(b) Amount worse	\$8.1	\$2.4	\$.2	\$11.7
(c) Per Claimant	\$ 537	\$1,520	\$ 252	-
2. (a) Claimants better off w/NF	2,247	3,900	90	6,237
(b) Amount better	\$4.1	\$12.0	\$.1	\$16.2
(c) Per Claimant	\$1,816	\$ 3,077	\$ 933	-

Table 20.--Summary, Consumer No-Fault Allocated Loss Adjustment Expenses, Trended Data--\$ = 000,000.

Claims	No-Fault*	Tort
Bodily Injury	\$ 74.3	\$ 95.5
Property Damage	\$ 23.2	\$ 23.1
Combined	\$ 3.3	\$ 4.2
TOTAL	\$100.8	\$122.8

* Actually this column represents an amalgam of NF/ALAE in the specified ranges and Tort/ALAE changes above those ranges.

The items of an apparently more efficient delivery system for both PD and BI claims support the position of no-fault proponents in that savings are possible. It is apparent, however, that the amount of savings does not offset the additional cost of payments.

The gross savings in ALAE is \$22 million over all types of claims and over the full spectrum of consumer claims.

The analysis of no-fault has led the reader to the same point in space as the analysis of the existing system, namely, to the "Source and Distribution of Funds" under the provisions of the synthetic NF system. Please note the format of Table 21 is identical to that of Table 9, in its general construction. A loss ratio of .50 was also assumed for Consumer Claims.

The flow of funds of the no-fault system as described was with one third going to the claimants; 15.6 percent to the legal community, and the assumed portion to the insurance community. The coverage ratio, 92.7 percent. There also appears to be a more favorable ratio of legal to claimant payment; for every \$1 paid for a claim, 42 cents accrues to the legal community.

Comparison: Tort (Table 9) and
No-Fault (Table 21)

The very crux of this Cost Benefit treatment revolves around the receptors and payors of the funds flow.

From tort to no-fault the following is a difference analysis:

Manufacturers pay:	\$113M more	12.8%+
Legal receive:	\$ 16M less	9.3%-
Claimants receive:	85M more	32.5%+
Insurance Companies receive:	44M more	9.5%+

This over-simplified display of numbers is explained thusly:

Increased payments by the manufacturer through increased premium expense is added to the reduced revenue for the Attorneys. This nets an additional funds flow of \$129.

Claimants receive an additional \$85 million and the insurance companies receive \$44 million more; the former for damage indemnification and the latter for additional administrative costs in processing and paying thousands of additional claims.

Table 21.--Consumer No-Fault Source and Distribution of Funds,
Trended Data--\$ = 000,000.

Source	Distribution			
	Claimant	Legal	Insurance Company	
Manufacturers Premiums Written				
Total	\$979.4			
Loss Ratio	\$489.7			\$489.7
ALAE	\$100.8		\$85.8	\$ 15.0
Claims Paid	\$388.9	\$326.1	\$62.8	
Manufacturers Payment Over Coverage				
Total	\$ 14.7	\$ 11.4	\$ 3.3	
Manufacturer Legal				
Total	\$ 4.3		\$ 3.3	
	\$998.4	\$337.5	\$156.2	\$504.7
	100%	33.8%	15.6%	50.6%
Consumer Economic Loss				
Coverage Ratio	$\frac{\$337.5}{\$365} = 92.7\%$			
Average Paid Claim (Net) = \$5570 (60,590 claims paid)				

Workers' Compensation

The much discussed systemic remedy to compensate injured workers for workplace-product related accidents is to expand the existing social insurance institution of Workers' Compensation. In the expansion, Workers' Compensation would become the exclusive Source of Recovery in workplace accidents in exchange for substantially increased benefits in the system.

An excellent description of this remedy and many surrounding issues is contained in the ITFPL-Gordon Report. The elements of that presentation need not be reproduced here.

The issue of subrogation effects does exist but the lack of data prohibits any definitive extensions and connections to this study. The ISO study attempted to include some hints on subrogation, however, they acknowledged that their information was sketchy, incomplete and of doubtful accuracy.

The Gordon study stated, and this author agrees, that the Courts would force a quid-pro-quo whereby an injured worker must acquire substantial additional relief in the adoption of Workers' Compensation as the sole source of recovery in exchange for the surrendering of his tort rights to compensation under the present system. The Gordon Report held the opinion that the minimum acceptable standards which would be upheld by the courts would be the provisions of the Federal Employees Compensation Act (FECA). Its key provisions are:

- A maximum weekly benefit for disability/survivor compensation up to 200 percent of the State's average weekly wage,
- An escalation provision on disability or survivor annuities up to 8 percent annually.

The details and other enhancements were embodied in H.R. 2058 (1976).

Highlighting the Gordon Report were two important estimates of the Workers' Compensation rate changes under differing assumptions of H.R. 2058 as well as some other scheduled changes. These different assumptions were:

1. if the enhanced Workers' Compensation System covered all workplace injuries and,
2. if the enhanced Workers' Compensation System covered only product related workplace injuries.

These rate increases were a whopping 71 percent and 22 percent respectively, based on 1975 costs. Even though these numbers reflect the approximate relative increases, the circle could not be completed since the absolute size of worker/PL system had not been determined. In other words, until now a good estimate had not been developed for the number and dollar value of Worker Injury/Product Liability claims. This study gives an estimate of the absolute level of activity, allowing a closing of the circle in a very simple and straightforward manner.

Since the Gordon estimates, which here are accepted as accurate, were based on 1975 data and because this study utilized 1976 data, a series of adjustments had to be made by this author. The key figure which had to be constructed was the portion of Workers'

Compensation cost increases occurring between 1975 and 1976 which were attributable to benefit increases; that is, those increases which would be included under the H.R. 2058 and the increased annuity.

In order to make the adjustment, one must recognize the components of compound changes contained in the increase from 1975 to 1976.⁴ These are:

- increase in number of workers covered by Workers' Compensation in 1975 to 1976; 2.1 million workers, or 3.1 percent increase,

- the inflationary component caused by the rise of services and wages. Estimated by CPI increase 1975-1976: 4.8 percent,

- increase (or change) in administrative costs which was noticed both in the difference between premium and benefits, and also, in the loss ratio. There was an unexplained but identifiable increase of \$864M in administrative costs,

- an increase in costs due to changes in the structure of paid benefits.

The assumption necessary to finish the calculations is that the 3.1 percent and 4.8 percent reasonably reflect the amount of increased activity and expense in the first two categories above.

The net real increase apparently due to benefit increases was \$418M or 4.7 percent (Table 22). Now this percentage is directly subtracted from the 22 percent and 71 percent before the cost increases on the 1976 dollars are multiplied (Table 23). This results in a 17.3 percent or \$1.877 billion increased costs on only product related, and 66.3 percent or \$7.195 billion on all workplace accidents.

The absolute dollar comparisons then can be made and they are astonishing. In Chapter IV, the estimated total funds flow

Table 22.--Determination of Cost Increase Component Due to Benefit Increase Workers' Compensation: 1975 to 1976.

1. 1976 Premium Cost	\$10.852B
2. Less 1975 Premium Cost, \$8.857	
Adjusted for:	
a. Increased population x 1.031	
b. CIP increase x 1.048	\$ 9.570B
3. Less Change in Administration Costs	
1976 Administrative Cost \$3.390B	
1975 Administrative Cost \$2.338	
x 1.031 x 1.048	
	(-)\$2.526
	\$.864B
Amount Attributable to Benefit Increases . . .	\$.418B
or $\frac{\$.418B}{\$8.857B} = 4.7\%$	

for product related claims from the on-the-job situation was \$411 million. The cost of the cure for the illls in that system will cost either

- \$1.877B or 4.56 times more for product related cases,
- or \$7.195B or 17.5 times if the benefit increases apply to all workplace injuries.

Stated again, the cost of the rate increases due to this systemic change is 4.5 or 17.5 times greater than the cost of operating the entire existing system. It is safe to say that these results probably had not been anticipated.

Table 23.--Computation of Workers' Compensation Rate Increases Based on 1976 Data.

1. Product Related Workplace Accidents

1976 Premium Cost	\$10.852B
1975 Increase, 22%	
Less 1976 Improvements <u>-4.7%</u>	
17.3%	x <u>.173</u>
Net Increase	\$ 1.877B

2. All Workplace Accidents

1976 Premium Cost	\$10.852B
1975 Increase 71 %	
Less Improvements - <u>4.7%</u>	
66.3%	x <u>.663</u>
Net Increase	\$ 7.195B

Note: It is assumed that all benefit improvements 1976 can be applied against provisions of previous Gordon computation for 1976. If they cannot be applied both net increases would be greater.

FOOTNOTES--CHAPTER V

¹See detailed computation in Appendix C, Section 8, especially 8c.

²See Appendix C, section 8 again for detail.

³For ranges see ISO Table 6A, page 202. Recomputed ISO Table 6A to reflect change from "Incidents" to "Claims:"

<u>Range</u>	<u>Claims</u>	<u>Average Paid Claim \$</u>
1	12,153	\$ 163
2	1,678	822
3	721	1,458
4	465	2,032
5	333	2,607
6	542	3,549
7	329	5,039
8	273	6,948
9	201	10,096
10	260	12,388
11	359	20,678
12	184	43,342
13	94	81,172
14	17	131,656
15	21	195,142
16	13	255,759
17	9	308,401
18	4	491,700
19	9	1,479,259

⁴David N. Price, "Workers' Compensation: Coverage, Benefits, and Costs, 1976," Social Security Bulletin (HEW), March 1978.

CHAPTER VI

SUMMARY AND CONCLUSIONS

General

Up to this point, the author has refrained from expressing his judgments on the findings of the work, although he recognizes that value-laden judgments are very important in assessing social systems. However, the judgments should be first labelled as "opinions." Oftentimes policymakers, motivated by a true sense of inner personal goodness, assume that they are annointed and charged with the task of proselytizing their unlabelled brand of fairness throughout the society. Thus, they often tend to ignore or discount or dismiss the differing but nevertheless legitimate values held by others in the society. This author will assume no such cloak but does believe that he has the right to offer a set of opinions, so labelled and thus open for review and comment.

Before this study, few empirical data were developed to either test or support proposed solutions and remedies to the perceived PL problems. It must be mentioned that policymakers, whatever their values, do not like to take positions contrary to the preponderance of evidence. It is acknowledged that there exists a great expanse of turf, the area of political argument, between no empirical data and the preponderance of fact.

By no means does this study constitute preponderance of fact. Nevertheless, the research is much closer to hard fact than it is to the soft rhetoric previously offered on the topic of product liability.

Within three years, it will be possible to determine the work's accuracy. The industry reporting practices will have caught up to the industry's information needs then these product liability estimates will be replaced by facts. However in the interim, the data and the supported opinions herein can be of immense real value to those associated with the issue.

Findings--Existing System

In Chapter IV, the examination focused first on the size and scope of the existing product liability system in 1976 using a developed estimate of 70,000 claims. Thereafter, a detailed component breakdown was provided for Bodily Injury (BI) vs. Property Damage (PD) claims stressing the net dollars ultimately paid to the claimants. By "net" is meant dollars after deduction for claimant legal fees. The component breakdown was continued with the separation of claim dollars and costs into the categories of "Consumers" and "Workers." The latter was essential to the comparison of the existing system with the synthetic no-fault system.

The flow of funds structure was constructed which showed, for all categories, the major observable and measurable funds transferred between the actors of this system. The major transfers are: Manufacturers Premiums Written; Net Claimant Dollars; Allocated Loss Adjustment Expense; Carrier Payments; Legal Fees; and other

manufacturers expenses. Of course, these flows do not represent the total cost of operating the system but it is believed that the flows identify a rather large portion of the system's overall activity.

Much of the rampant comment on product liability centers around its potential threat to the nation's industrial stability. Evidence pointed to the strong and growing disincentive to the manufacturing sector caused by the ballooning insurance costs which led to actual cases of the manufacturers refusing to make socially beneficial products. Moreover, the potential impact of the issue on small manufacturers and especially the food processors (foods generate the greatest number of claims) was viewed as particularly devastating. Many impacted companies had their PL rates raised to 10 percent - 20 percent of their annual sales.

It was decided to test the size criterion of total funds flow against the 1976 sales of the entire manufacturing sector. The decision rule was formulated that if the total funds were 1.0 percent or greater of the manufacturing sales, then the issue would be judged as very important, thus requiring immediate and strong government response or perhaps intervention in the problem. Such was not the finding, since the funds flow was only .1 percent of sales in the period chosen.

On the other hand, this very small percentage of total sales cannot be ignored, but it is very difficult to argue the need for massive and immediate government action to rescue the business community. It is obvious to this author that the issue has not significantly impacted the broad spectrum of the manufacturing sector.

Evidence was found in a close examination of the ISO data which could be interpreted that the PL problems are particularly acute for certain products. Even though the food sector generates by far the most claims (56 percent), foods are not responsible for a significant number of serious claims when judged by the size of claims. The products causing the serious claims are automobiles and related parts, such as tires; next follow prescription drugs and then industrial equipment. For example, fully \$1 of \$7 in gross claims payments are auto related. About \$1 in \$13 are drug related; work-place equipment experiences the same magnitude of activity. After these major product lines, the impact by product becomes, in this author's opinion, rather diverse.

What are the implications of this product finding? It further supports the idea that the issue does not impact the full range of manufacturers. It allows accepting both contentions commonly discussed: first, serious product liability problems do exist but may be concentrated in certain product lines; and second, the issue is not immediately threatening to our overall industrial health. It can also be argued that the carriers reacting to well-publicized cases in the heavily impacted product lines assumed that the problem was pervasive and reacted, or perhaps overreacted accordingly.

Continuing on the product line analysis, it can be said that much difficulty on rates was caused by the (1) increased sensitivity of the carrier and (2) the lack of properly developed experience data either on the specific product or on the individual firm. The latter point simply means that the insurance industry, until recently,

had not viewed PL as sufficiently important to develop suitable internal information enabling the carriers to adjust the rating procedures by class or by the individual firm.

Looking at autos, drugs and machinery again but through the perspective of public policy, one quickly notices that these three serious product lines are already highly regulated by federal agencies in a safety sense. The National Highway Safety Administration and the automotive industry are in a state of constant confrontation on safety matters. The Food and Drug Administration, by statute, requires extensive safety testing before release of any drug to the market. The Occupational Health and Safety Administration has a set of tough workplace standards and the means to enforce them. This brings forth an interesting but unanswerable question, a variant of the "chicken or egg" dilemma: are these product lines regulated because they are inherently dangerous or has regulation perhaps adversely affected safety development in these areas? Unfortunately, this study does not contribute to answering the question because the regulators will take the posture that the safety record would improve with more regulation, and the involved industries continuously state they could do a better job if they were not constantly harassed.

In the existing system, there is a very large block of claims (one third) which result in no dollars being paid to claimants. This one third of all claims does add costs to the system's operation but result in the claimant receiving nothing for his damages from the PL system. The reasons for this large number of claims are believed to be:

1. there are probably many nuisance or frivolous claims;
2. there are many accidents/claims which are not caused by a negligently or defectively manufactured product;
3. the system probably does a reasonably effective job of screening out the above claims.

It is not to be inferred from these three points that the unsuccessful claims were dishonestly conceived or filed. Such is not believed to be the situation. More likely, a claimant has experienced a real accident and incurred real economic losses. Therefore, he seeks indemnification by any means of recovery available to him under the present rules of the system. These include not only his collateral sources but also tort. In PL, the claimant costs for filing a claim are relatively small because of the contingent fee mechanism, thus the claimant faces little disincentive for filing.

In a countervailing sense, in this author's opinion, existing tort law apparently operates effectively under its present rules which require that the plaintiff establish the defective product/accident connection. The burden of proof remains with the plaintiff. A major objection made by the no-fault proponents surfaces here in that they object to the secondary costs of the screening process itself. This process does create costs which are felt first by the carrier and passed on the manufacturer and then to the market.

Interesting differences appear between the funds flow in its major divisions; that is, between Bodily Injury and Property Damage, and, Consumer and Worker claims. A comparison technique was developed for all categories to describe the amount of Net Dollars Paid to

Claimant relative to the economic loss experienced. Since data on the individual claims were not available, the "Coverage ratio" could only be applied to the claimants as a group. However, recognizing the difficulties and potential inaccuracies in estimating economic losses within any large group, the ratio still fairly and consistently depicts the monies paid to claimants based on their total economic losses. It should be noted specifically that the net claimant dollar used have the claimant legal costs deducted. The average net paid claim is \$5914.

For BI claims, the coverage ratio was 1.02 which means that, as a group, the BI claimants received 102 percent of their estimated total economic loss. Noting the previous paragraph about the number of claims not paid, about one third of these claimants received nothing while others received payment above the identified losses. Punitive damages and payments for pain and suffering comprise the difference. If one calculates the coverage ratio with only paid claims, it jumps to 1.54. To this author, this ratio means that successful BI claimants are well-compensated not only for economic losses but also for pain and suffering.

The situation with PD claims is markedly different in several ways. Even though the PD claims account for 37 percent of all claims, the preponderance of activity has not been devoted to this type damage. Rarely did the author find a record of a high value PD case in trade articles.¹ For example, the average net paid claim was \$2693.

The coverage ratio for all PD claims was calculated at .24 which means the system only replaces 24 percent of the total economic loss of the group. If one considers only those claims having payments, the ratio rises to only 37.6 percent. For whatever reasons, the system severely discounts PD losses. Although the exact reasons underlying this discounting are not known, a couple can be conjectured. These are the possible conditions which provide for the difference in system reaction to PD and BI claims payments. They are:

1. The PD losses, in the usual situation, are more easily determinable than BI losses. The ability to measure with reasonable accuracy would tend to reduce the size of the payments because the system would be covering loss uncertainty.
2. The PD loss does not contain the emotionalism or the empathy generally associated with a severe BI loss.
3. Perhaps the juries and judges have adopted a "caveat emptor" attitude toward the PD losses. Perhaps the condition is brought about by a preconceived attitude that physical property damages are "acts of gods" and the burden of these costs should "lie where they fall."

These reasons seem rather logical to explain some reduction in the level of payment but do not necessarily explain the degree of difference.

Combined claims are accident claims which have both components, BI and PD, in the same action. The number of claims is small, 1700 or 2 percent of all claims. It appears from the data that the BI component swamps the claims. The average claims payment--net is \$12,716.

To examine the relationship between Consumer and Worker claims, all claims were recombined and then split apart again. It

was assumed that all PD claims were Consumer, whereas the BI had to be divided into Consumer/Worker categories. Thus the Consumer claims contain a portion of the BI claims and all the PD, whereas the Worker claims contain the remaining portion of BI only.

In claims volume, the system is dominated by Consumer claims with 63,580 of 70,000 claims. These claims resulted in net payments to the consumers of \$252 million covering estimated economic losses of \$364 million for a coverage ratio of 69.2. It must be recalled that the PD claims have tended to bring down this ratio. The source of funds, which is also the sum of manufacturer payments, is \$885 million. This includes the estimate of Premiums Written² and Manufacturers Payment in Excess of Coverage.³

Of the total funds flow of \$885 million, \$252 went to the consumer (28.4 percent), \$172 million (19.4 percent) went to the legal community, and \$461 million (52 percent) went to the carriers.⁴

The estimate of legal expenses at 19.4 percent, to this author, seems not only reasonable but appropriate for the legal protection of all parties to the system. It is acknowledged that someone will point out that for every dollar received by a claimant the attorneys get 64 cents. This is true, but it is not necessarily relevant to the claimant receiving or not receiving sufficient payment for damages. The 64 cents are transaction costs as are carrier expenses.

It may appear that carrier expenses are high, and it is admitted they may be slightly higher than the nominal figures because of an assumed low loss ratio but it was felt more appropriate to

slightly overstate carrier expenses, thus keeping the size estimate of total system high which strengthens the conclusion about size. However, it can be argued that these are not badly distorted. Brokerage expenses and commissions usually paid to outsiders are estimated to be \$130 million of the \$460 million. Of the ALAE, \$28 million is passed through to outside investigative agencies leaving the remaining \$300 million for administrative expenses and underwriting profit. The other implication of a higher than real percentage for the carrier would be the slight understating of the legal percentage. Even though the legal percentage may be slightly understated, it does not affect the relationship between legal fees and claimant payments.

Injured workers fare much better than consumers as a group, since the coverage ratio is 1.045 meaning that the system indemnifies workers with 104.5 percent of their losses. Because of a different assumed loss ratio for Workers' Compensation coverage the percentage of the funds flow to the actors differed slightly. Here the claimant received \$146 million, or 35.5 percent, the attorneys' 21.8 percent or \$90 million, and the carriers \$176 million, 42.7 percent. The same position taken on legal and carrier expenses applies on the worker side.

The amount of total dollar activity between Workers and Consumers is also interesting. The total funds flow for Consumers is two-plus times Workers flow of funds but has ten times the claims volume.

No-Fault System--Consumer

It was necessary, in Chapter V, to start a no-fault analysis at the point where the estimate of the existing system ended.

The intent of the Consumer no-fault study was to determine the validity of the arguments set forth by no-fault proponents; namely, that the additional costs of operating a no-fault system can be covered by:

1. reducing the average claim size. The mechanism used is the offset of collateral source payments against economic losses.
2. eliminating pain and suffering payments, and
3. reducing legal expenses.

Thus, a synthetic NF system was formulated and superimposed on the existing system. In order to complete the calculation, several major assumptions had to be made. These assumptions were:

1. All small claims would be handled by no-fault. Small was determined to be about \$7000 for BI claims and \$5000 for PD claims. NF was tested on over 85 percent of all consumer claims.
2. The one third of the claims which were not paid under the existing system provided the number of additional claims generated under no-fault. This was felt to be an acceptable minimum quantity for testing. No other provisions were made for additional claims.
3. The NF/PL system needs a minimum legal review because accident records and evidence are not available as in either auto accidents or medical malpractice.
4. The offset of collateral source payment and elimination of pain and suffering payments would be utilized.

The calculation for the Consumer No-Fault system was much more difficult than the existing system because it was necessary to

apply factors to ranges of claims within a particular category rather than to a whole category.

It became further complicated since the ISO data were aggregated by claim size and not available individually. For example, in order to calculate the collateral source offset on the smaller claims, economic losses, and both over-payment and underpayment had to be determined for each group of claims with the same average claim size. Considering there were 19 levels of paid claims in each BI and PD types, the levels tested were aggregated where the average claim size was of the same general magnitude. A choice of a boundary had to be made between the various ranges such that above the boundary would be those claims handled only by tort, and those below would be tested with NF. The criteria used for this judgment were (1) the degree of disincentive of lower payment under NF for BI claims, and (2) \$5000 for PD.

The total of all funds flow in NF, compiled in a similar manner to tort, was \$998 million which was split roughly 34 percent to the claimant (net), 16 percent to the legal community, and the remainder to the carrier. In dollars, the claimant net was \$337 million; legal received \$156 million; and the carrier \$504 million. The increased cost reflected payments to an additional 17,910 claims. The average net paid claim under NF, become \$5570.

The value of these NF numbers is not in their absolute magnitude as were the figures for the existing system, but in their relative magnitude when compared to the existing system.

Comparison: Tort vs. No-Fault Systems--
Consumer

The summary of the relevant items for comparison are shown in Table 24. The absolute as well as the relative changes on each line item are displayed.

Table 24.--Comparison: Consumer No-Fault vs. Tort/Fault.

	Fault/Tort	No-Fault	Δ	Percent Δ
1. Claims				
a. Paid Number	42,680	60,590	17,910	+42
b. Average Paid Claims	\$5,914	\$5,570	\$ 344	- 6
2. Funds Flow--Net \$ = 000,000				
a. Total Flows	\$ 885	\$ 998	\$ 113	+13
b. Legal Payments	\$ 172	\$ 156	\$ 16	- 9
c. Claimant Net	\$ 252	\$ 337	\$ 85	+34
d. Carrier Expense	\$ 460	\$ 504	\$ 44	+10
3. Gross Payments \$ = 000,000				
a. Claims Not Paid Under Tort; Paid NF	-0-	\$ 75.6	\$ 75.6	N.A.
b. Paid Claims Tested Under NF	\$ 15.2	\$ 19.7	\$ 4.5	+30
c. Claims Paid by Tort--In Both Tort and NF Systems	\$ 293.6	\$ 293.6	-0-	-0-
			<u>\$ 80.1</u>	

The number of claims paid, which was largely assumed, is 42 percent greater under NF than tort. A full 90 percent of the Claims Not Paid under Tort were assumed to be potentially payable under no-fault. These additional claims generated additional claims dollars of \$85 million to the claimants as a group. What is crucial, of course, to test the validity of the no-fault position is to determine from where these additional monies come. However, before addressing that question, it must be noted that other expenses are generated in the insurance area for handling 18,000 more claims. This amount was estimated at \$44 million; which, when totalled with the consumers \$85 million, comes to \$129 million. The savings in legal fees is only \$16 million; thus, the difference of \$113 million must be borne entirely by the manufacturer.

The reason behind the rather small contribution of legal savings to the NF system lies in the fact that some minimum but formal legal review is necessary to screen out nuisance claims. Unless some control process is used, the claimant could simply apply for and would expect to receive payment, without demonstrating the product/accident connection. The relatively small cost of an arbitration hearing applied to 10,000 claims cancelled a major portion of the anticipated legal savings.

The same general argument holds for the administrative expenses of the carriers. The carrier incurs much more expense in handling claims involving payments than those not paid, thus these costs reflect that phenomenon.

Distribution Effects: Consumer
No-Fault Claims

The Comparison Table 24 shows in Part 3 the aggregated shifts in gross payments of the three major claims groupings as brought about by the NF imposition:

- a. Claims which had no system payments under the existing system, but generated system payments under the synthetic system of no-fault. About 17,000 claims constitute this grouping with 60/40 percent, BI to PD split.
- b. Claims which received payments under tort and were tested by the No-fault system for payment. There were approximately 38,000 claims in the category which were also split roughly 60/40 percent.
- c. Claims which were payable under tort and assumed payable under No-Fault since they were of such a size that the consumer would choose tort relief rather than No-Fault. About 7,000 claims are in this group.

The total shifts in payments is striking not because of the \$80.1 millions involved in the shift but the claims grouping which receives the greatest impact. The "Claims Not Paid Under Tort" receives fully 94 percent of \$75.6 million in payments under No-Fault. In other words, the most significant shift of funds to the consumer is toward those 17,000 claimants which previously received no direct payments from the PL system. The split of the \$75.6 million between Bodily Injury and Property Damage was almost 50/50 percent. The percentage of shift, 94 percent, indicates to this author the likelihood of significant sensitivity of a similar synthetic NF system to the additional number of small claims generated under conditions of absolute liability.

The remaining portion of the \$80.1 million, the \$4.5 million, is very deceptive when viewed in the aggregate. First, it is a net

figure showing the net sum of all the adjustments on all 38,000 paid claims. Thus, some savings in an area are offset by additional costs in another. For example, there were savings in Ranges 1-4 of the Bodily Injury claims amounting to \$2.2 million. However, in the Range 1-5 of the Property Damage claims, No-Fault, even with the \$5000 limitation, added costs of about \$3.9 million. Second, the adjustments netted out are those which the NF proponents felt would provide the appropriate savings; namely, collateral source offsets and the payment greater than economic loss which are payments for pain and suffering and punitive reasons.

If one examines again Table 15 and recalls that "Payments Lost Under Tort" are also "Savings Under No-Fault," it can easily be seen that even if No-Fault was imposed up to Range 10 only \$13 million more would be contributed to offset the \$35.1 million for the additional BI claims.

Lastly, when dealing in ranges of claims where there are a considerable number of claims which are paid above and below economic losses, the imposition of no-fault will level those payments; that is, some of the monies in overpayments would be used to cover underpayments within a given range.

Because the distributional difference in funds flow for consumer BI and PD claims are so important to the final assessment of no-fault, they must be treated separately.

The total consumer BI picture ended as follows under No-Fault:

--10,000 claimants would receive \$35.7 million, which they would not have received under tort,

--21,700 claimants with small claims would receive \$2.2 million less under No-Fault (\$6.3-\$4.1),

--4,129 claimants with the large claims were assumed to be handled under tort only. Their payments were \$227.3 million; thus, the average claim size was about \$55,000.

The final fallout of these figures is that a \$2.2 million in savings from 21,700 claims was all that became available to offset the \$35.7 million spent on "new paid claims" under No-Fault. It appears to the author, that extensive savings due to the elimination of payments for pain and suffering, punitive damage, and with the collateral source offsets are not present in this synthetic consumer elective No-Fault system. Furthermore, when one proceeds upward to larger claims, the disincentive for the claimant to opt for No-Fault dominates due to the extensive reduction in claim payments. The Combined Claims follow this whole general pattern of BI claims.

Not unexpectedly, the picture with Property Damage is again different from Bodily Injury. The distribution under No-Fault ended as follows:

--7,400 PD claimants would receive \$37.1 million which they would not have received under tort.

--16,221 PD claimants would receive \$5.54 million more under this No-Fault system.

--1,444 PD claimants with large claims were assumed to be handled by tort only. These payments would be \$57.8 million, or about \$40,000 per claim.

There are three considerations bearing on this PD distribution. Even though a \$5,000 per claim limit was used as part of the PD No-Fault system, the payments are still substantial. Second, under this system there were no savings whatsoever for offsets on the

small claims. And third, one must admit to a counter-argument which will be brought up by No-Fault advocates. One proposal to limit No-Fault payments stipulates that No-Fault would be applicable only to warranty-specified damages. Obviously, such restrictions would reduce payments but to what extent is not known.

Summary of Consumer No-Fault Findings

There are observations which stand out in the above analysis:

--the most significant increases in claimant payments comes from claims not paid under tort. This means that this synthetic system is very sensitive to new claims. In other words, if a similar NF system is imposed for Product Liability, it likely will be significantly affected by the additional number of claims brought on by the conditions of absolute liability. This finding tends to support the manufacturing community's uneasiness regarding the volume of additional claims which might be filed under No-Fault.

--the distributional shifts, or the savings due to the elimination of pain and suffering and the savings provided by collateral source offsets were much smaller than expected. If the imposition of NF were to proceed toward the larger claims producing more NF savings, the built-in disincentive for the consumer to opt for No-Fault would probably dominate.

--the last observation is simple. If the minimal savings of legal expenses is coupled with the observation of claimant payments and on the minimal distribution advantages, very little support can be given for any of the No-Fault arguments under this synthetic system.

Workers' Compensation

The remedy of using Workers' Compensation as the sole remedy for all workplace accidents, thus replacing an injured worker's tort rights with increased benefits, was studied. Two alternatives had been offered in a Congressional study and explained in the ITFPL-Gordon Report. The presumption behind both alternatives was that some tradeoff must be allowed to the workers for foregoing their PL

tort rights. On each alternative, the level of benefits would be raised to the levels provided by the Federal Employees Compensation Act (FECA). The details of these benefits are covered in Chapter V.

The first alternative would provide FECA benefit levels for only product-related workplace accidents, whereas the second alternative would provide consistent minimum FECA limits for all workplace accidents. The Congressional study estimated the rate increases would be 22 percent and 71 percent respectively on 1975 rates.

This author simply updated those rates to 1976 data and determined that the increased cost for the alternatives would be \$1.9 billion and \$7.2 billion respectively. Since the total PL funds flow of Workers' Compensation in 1976 was estimated to be only \$.4 billion, serious questions are raised. The great disparity between increases and total funds flow (4.5 x or 18 x) indicates either a very bad tradeoff for the manufacturing community or an overestimated rate increase for the upgrading to FECA.

The author feels that it is terribly unfortunate that the greater issue of increased benefits for injured workers should be muddled up with the product liability/sole remedy question. These two issues are of differing magnitudes like a watermelon and a cherry, and should be treated separately.

Nothing was found here to support the use of Workers' Compensation as the sole remedy if provisions of FECA need to be imposed. The cost of the cure apparently far outweighs the cost of the product liability problem itself.

Medical Malpractice and Product Liability

Some comment is necessary here showing the parallel but asynchronous tracks ridden by both medical malpractice and products liability. Even though both are going down a similar road, medical malpractice is three to four years ahead and more mature as an issue. A few of these similarities and perceptions were brought out by O'Connell in his Ending Insult to Injury. Now these similarities have been further strengthened by size comparison given here, and yet more similarities become evident. One need only recall the intense rhetoric by the medical community a few years ago about medical malpractice being a distinct and real threat to the health of the nation, and then recall what happened after the rhetoric subsided.

The medical malpractice experiences chronologically are:

1. Coverage rates increased sharply, as did patient fees.
2. The industry, then, through government prodding, produced information on an industry-wide basis on premiums and claims experience. This was done by the carriers showing medical liability insurance as a separate line item in company reporting.
3. Then gradually, the carriers changed their rating policy from a classification rating to a combination of classification and experience rating. This step took time because building experience records for the many insured physicians and others takes a discreet amount of time. A recent California study bears this out.⁶ Its major finding held that the carriers now could identify the individual physicians who, for whatever reasons, attracted malpractice suits. Only after this identification process is completed, can the carriers

differentially apply rates to these very high risk physicians. The same should be true in product liability.

4. The net result of the above was a series of internal adjustments which reduced the medical malpractice problem. These adjustments do not at all mean that the situation returned to the conditions that existed prior to the alledged "crisis." But the level of activity and rates did settle at a level greater than before; but, at a level where the medical community could cope by passing on the increased costs.

The first, and key recommendation of this Product Liability study is that policymakers allow these internal adjustments to proceed in product liability as it did in medical malpractice. The size of the problem and the striking similarities of PL to medical malpractice, at least to this author, are convincing. This does not mean that government should ignore PL. Not so, because government should (1) continue to monitor the progress of claims volume to assure both the business and insurance communities that the internal adjustment process is proceeding and, (2) provide consistent guidelines for informative reporting which is essential to aid the recovery process, and (3) address efforts to the identified sectoral problems.

Other Recommendations

What are the policy implications of these findings? The decisions faced by the policymakers are rather logical:

- the federal government should continue to monitor volume of claims for a potential and continuing rate of increase in claims

filing. Herein lies the only real danger of the system. The history of medical malpractice claims, if applicable here, does not support a massive explosion in the number of claims filed. The federal government has an agency performing the function now. Thus it is recommended that it be maintained until the industry information on PL improves.

- the federal government and state policymakers should recognize that PL does not represent a strong and immediate threat to the life of the industrial community because of its relatively small size.

- it must be recognized that severe problems do exist in specified sectors such as drugs, autos and machine tools. Perhaps either sectoral solutions rather than systemic or tort solutions are dictated.

Finale

The well-established PL system seems to be working satisfactorily based on the analysis of 1976 data and on the value judgments of the author. It has experienced a traumatic shock similar to that of medical malpractice but similarly should settle down soon. True, the level at which it settles will involve slightly greater costs to the cost bearers. Nevertheless, the manufacturing community should be able to cope.

The government, both state and federal, should concern itself with (1) monitoring the system to assure the industry sector that the

system is within control, particularly in the volume of new claims; (2) concentrating study on industry sector problems particularly in automobile, drugs and machine tools, as these provide special problems; and lastly, (3) the gathering and publishing of information on claims, premiums, and other funds flow within the system.

FOOTNOTES--CHAPTER VI

¹A notable exception to this statement occurred in Michigan in the liability actions on cattle herd losses due to a fire-retardant chemical (PBB) mistakenly added to cattle feed.

²See Footnote 11, Chapter IV, for detailed explanation.

³See Table 9, Chapter IV.

⁴See Footnote 11, Chapter IV, for carrier breakdown.

⁵See Table 18 for details. The meager collateral source savings in BI were more than offset by an increased level of PD payments. The savings ended up as an increase.

⁶See article by Schwartz and Komesar which outlined experience of physicians in California in malpractice claims. They found that there were "good" and "bad" doctors. For example, only 0.6 percent of the doctors generated 10 percent of the claims and 30 percent of all payments.

APPENDICES

APPENDIX A

Review of Literature

The literature treatment of the product liability issue very closely parallels the insurance carriers treatment of PL insurance. Until the last few years, the insurance industry thought of PL insurance as a "throw-in" product which means that it was deemed so unimportant and trivial that the carriers and underwriters "threw the coverage in" with its major casualty proposals at virtually no cost to the client. In essence, PL was far overshadowed by the more important premium producing lines. The same situation was reflected in the literature when some authors, only for the sake of completeness, included a paragraph or two on PL in their work on insurance. Until 1970, a chapter on the topic was rare.

The two major works listed in the body of this research will be mentioned here again, for the sake of completeness. These are the Insurance Services Office, Product Liability Closed Claim Survey 1977 and the multi-volume Interagency Task Force on Product Liability coordinated by the United States Department of Commerce. These two works fulfilled key roles which were adequately described elsewhere in this study and will need not be further amplified here.

However, Jeffery O'Connell's major work on product liability does require additional comment. His Ending Insult to Injury was simply an extension of his books and articles in other areas of No-Fault insurance such as automobile and health service where he has met some notable successes. One must constantly remind oneself when reading Ending that O'Connell and a very few others were the principal leaders in the successful implementation of automotive No-Fault.

His arguments in Ending are largely rhetorically based since, as was said before, little supportive or non-supportive data was available at the time of his writing. Unfortunately, he started, as most writing on PL, with several horror stories of how the tort system imposed harsh and seemingly unfair penalties on the claimants. Moreover, he complains strongly and often about excessive legal and administrative costs within the system.

His theory of No-Fault is based upon the principle that an increased number of claims can be effectively paid by lowering the overall average claim. Of course, this statement is quite logical but was quite unprovable until some numbers can be generated and thus provided the basis of this study.

He also made an interesting observation about automobile No-Fault which should be kept in mind when considering the legal implications connected to an accident incident. In an auto accident both parties have supposedly an equal chance to cause that accident. This underlying principle is not present in product liability since the courts are rather reluctant to accept contributory negligence or the "stupid" behavior by the injured party.

The single biggest weakness in his Ending was his rather loose treatment of the limits that manufacturers might choose in their election of No-Fault warranties. He speaks casually about elective limits in multiples of \$10,000, implying \$10,000, or \$20,000, or \$30,000 or more. It is incomprehensible to this author that a small or medium sized manufacturer, or even a large company, for that matter, could accept a No-Fault risk in the tens of thousands of

dollars for every \$9.88 item sold. This casual talk indicates a less than realistic view of the survival instinct in small business. Under no-fault, the small firm loses one of its most effective counter measures, i.e. its smallness.

The major strength of Ending is O'Connell's description of the similarities between medical malpractice and product liability.

Several other articles have been published on the topic by O'Connell. One on Workers' Compensation as sole remedy and a couple one the bargaining or transferring of tort claims between involved parties.

Guido Calabresi of Yale is another No-Fault advocate. In his Costs of Accidents--1970 he writes about the comprehensive issue of accident compensation for all kinds of accidents--not only product liability. Like O'Connell, he uses rhetorical arguments of the social scientist in value-laden terms such as social insurance, lack of fairness of tort, and justice. Again, even though his words are logical and interesting, they eventually must stand up to the numbers of empirical research. An example of his value-laden statements (p. 266): "(the) fault system is not the system we would use if our aim were to establish an optimal system of market control of accident costs."

He goes on to suggest that the solution lies in intense government involvement. Such an approach immediately opens the discussion to the public policy arguments of whose control?, whose justice? and, of course, who decides?

An excellent book of readings has been put together by Editors: Rheingold and Birnbaum, Product Liability: Law, Practice, Science which focused on the underlying legal principles involved in product liability. In their introduction, they state the work was written to include the concerns of current practitioners and others in the field. The concepts and development of strict liability as well as a thorough discussion of the Restatement (Second Torts) Section 402A were included. Negligence, Defenses, Special rules and case preparation and execution are conceptually and procedurally covered by the articles and with copious editorial notes. This lengthy volume greatly simplified the research into the principles, particularly the principles of law which provide the underpinning of PL.

A very well written four pages on PL was contained in The Economics of Personal Injury by Ghosh, Lees and Seal, 1976. The piece was based on the more general topic of accident compensation but tested certain arguments with empirical data obtained from the Great Britain roadway accidents. The small chapter "Other Accident Areas" contains brief descriptions of the nature of the issues involved in industrial accidents and product liability accidents. No empirical data were furnished but the analysis contained a comparison of theoretical views of Walter Oi and Calabresi, Oi being the pure economist and Calabresi being the institutional economist.

Roland N. McKean in his article, "Products Liability: Implications of Some Changing Property Rights," treats PL and accidental damages in general as a special case of externalities. He goes over

the history and the usual range of issues related to the topic, even includes a page on No-Fault. On No-Fault, he predicted that the additional costs of "hiring ... purchasers or third parties to exercise care would be high." He predicted that accidents under No-Fault the number of claims would rise as would insurance rates.

One of the more interesting side issues in PL is the "Duty to Warn." Here, the manufacturer is required oftentimes to appropriately label his product such that the user is alerted to potentially dangerous use. Four authors, Twerski, Weinstein, Donaher and Piehler, wrote on "The Use and Abuse of Warnings in Product Liability." In the article, they took the positions (p. 500) that in many cases, a decision on failure to warn implies a decision that a product redesign is necessary, warnings are often an ineffective means of preventing accidents, warnings force users to balance his risks and make difficult choices and some warnings have information value only. It was a well-developed and logical approach to this side issue.

APPENDIX B

**Computation Detail of the 1976 Product
Liability Model Funds Flow--
Existing System**

1. Claims With Payment Calculated

- a. Breakdown of Estimated Claims
70,000 Claims--initial estimate of Total Claims
1976
- b. Split to:
47,740 Claims Paid
22,260 Claims Not Paid (1,148)*
- c. Claims Paid into:
28,930 Claims Bodily Injury
17,663 Claims Property Damage
1,147 Claims Combined (1,148)*
- d. Total Claims w/Payment (000)
BI (1.c x Average claim) \$402,445 (2-1, 24)
PD (1.c x Average claim) 67,088 (2-2, 151)
Co (1.c x Average claim) 18,118
\$487,651

*Notation means that the factor or ratio was obtained from ISO Report, Table 1, p. 148; used throughout Appendices.

2. Compute ALAE on Claims with Payment (000)

- a. BI used ratio of average payment to ALAE
(14-1, 90)
 $\$402,445 \times .2342 = \$94,253$
PD same (14-2, 91)
 $\$67,088 \times .3437 = \$23,058$
CO (used BI ratio) (14-1, 90)
 $\$18,118 \times .2342 = \$4,243$
TOTAL \$121,554

3. Compute Manufacturer Direct Claims Payment Costs--In Excess of Coverage (000)

- a. BI (37-1, 130) $\$402,455 \times .02986 = \$12,017$
b. PD (37-2, 130) $67,038 \times .1247 = 8,366$
c. CO*(37-1, 130) $18,118 \times .02986 = 541$

TOTAL \$20,924

*Used BI factor

4. Legal Expense--Defense Only (by Carrier) Computed as a portion of ALAE(000)

a. BI (14A, 248)	\$94,253 x .8355	=	\$78,748
b. PD (14A, 254)	23,058 x .846	=	19,507
c. CO*(14A, 248)	4,243 x .8355	=	3,545

TOTAL \$101,800

5. Legal Defense Costs--Manufacturer, Claims w/Payment

It is assumed that a defendant manufacturer will incur an expense of outside counsel for monitoring the carrier's handling of an action.

It is assumed to be 5 percent or 1/20 of the mainstream legal defense costs (000)

$$\$101,800 \times .05 = \$5,090$$

6. Grand Total Legal Defense Costs (000)

$$\begin{array}{r} \$101,800 \\ 5,090 \\ \hline \$106,890 \end{array}$$

7. Plaintiff Legal Costs--Claim w/Payment

It is assumed that the plaintiffs fees are equal to insurers legal costs.

Thus plaintiffs legal costs are assumed to be \$101,800,000 for Claims with Payment.

8. Reconstruction of Economic Loss by Payment Range--BI only

This required complete recomputation of ISO Table 5A based on:

- 70,000 total claims
- conversion of table from incidents to claims*
- breakdown of claims to Consumer/Worker
- profile of paid claims
- paid claims only

*There are more claims per incidents so the conversion required that the claims amounts be adjusted accordingly. Ratio adjustment = \$13,911/\$24,128.

Table 5A.--Recomputed BI Only.

TABLE 5A RECOMPUTED BI ONLY							
Range	Cls Profile	Consumer	Worker	Total Paid (million)	\$ Cnsmr (million)	\$Wkr (million)	AdjAvgCls*
1	19,425	18,742	683	\$ 2.7	\$ 2.66	\$.04	\$ 141
2	1,733	1,697	36	1.5	1.47	.03	967
3	837	695	142	1.2	1.01	.19	1,460
4	750	600	150	1.5	1.21	.29	2,011
5	468	360	108	1.3	0.97	.33	2,625
6	746	522	224	2.7	2.00	.70	3,623
7	663	471	192	3.4	2.38	1.02	5,060
8	709	482	227	5.1	3.47	1.63	7,189
9	535	358	177	5.2	3.69	1.51	10,285
10	323	213	110	4.3	2.85	1.45	13,358
11	817	531	286	16.5	10.73	5.77	20,213
12	730	467	263	30.4	19.44	10.96	42,617
13	535	327	198	44.8	28.20	16.6	83,688
14	240	149	91	33.0	20.4	12.6	136,943
15	83	51	32	16.7	10.1	6.6	201,378
16	79	47	32	20.7	12.46	8.2	262,838
17	79	47	32	26.9	16.17	10.7	341,195
18	58	34	24	22.5	16.50	12.0	489,492
19	120	60	60	156.0	77.8	77.8	1,297,967
TOTAL	28,930	25,863	3,068	\$ 402.4	\$ 233.6	168.5	-

* When adjustment is made from incident to claim the distinct and convenient boundaries of "Range of Payment" are lost. Thus the "Adjusted Average Claim" with a given range was thereafter used.

NOTE: The calculation and display of economic loss by range is given in the No-Fault Analysis

The column Totals are

Total Economic Loss	\$315,772,000 all claims
\$Payment over Loss	300,738,000
\$Payment Under Loss	214,044,000

The \$315 figure is split into
 Claims with Payment \$209,672,000
 Claims without Payment 106,099,000

9. Calculation of Economic Loss Over/Under PD Only

(ISO: 6B, 203) Ratio of Total Payments: 2.48 used

Total Economic Loss	\$174,036,000
Payment Over Loss	15,289,000
Payment Under Loss	122,346,000

The \$174 is Split

Claims with Payment	\$130,015,000
Claims without Payment	44,021,000

10. Calculation of Economic Loss Over/Under--Combined Only

Assumed that the BI component swamps calculations
Use same ratio as BI

Total Economic Loss	\$ 14,216,000
Payment Over Loss	13,539,000
Payment Under Loss	9,636,000

The \$14M figure splits to (.336)

Claims with Payment	\$ 9,439,000
Claims without Payment	4,777,000

11. Claims Without Payment Calculation

- a. Number of Claims w/o Payment--22,260
- b. Total Claims Payment = 0, by definition
- c. Breakdown into BI, PD, CO
Assume same ratio as claims w/Payment (.606, .370, .024)

Thus,

BI Claims	13,490
PD Claims	8,236
CO Claims	534

12. Calculation ALAE for Claims w/o Payment (000)

BI (14-1, 90)	\$3,121 x claims =	\$42,102
PD (14-2, 91)	934 x claims =	7,692
CO (14-1, 91)	3,121 x claims =	<u>1,667</u>
TOTAL		\$51,461

13. Legal Defense Fees for Claims Without Payment (000)

Compute as a percent of ALAE as in Claims w/Payment

$$\text{BI ALAE} \times .8355 = \$35,176$$

$$\text{PD ALAE} \times .846 = 6,507$$

$$\text{CO ALAE} \times .8355 = \underline{1,393}$$

$$\text{TOTAL } \$43,076$$

14. Legal Defense Costs--Manufacturers, Claims Without Payment (000)

As with Claims w/Payment, assumed to be 5 percent of legal defense

$$\$43,076 \times .05 = \$2,154$$

15. Plaintiff Legal Expense--Claims Without Payment

This figure is largely guessed because of the following factors:

- a significant number of claims could be nuisance claims submitted to carriers without aid of plaintiff counsel and later dropped w/o payment
- in the larger suits, claimants negotiating on a contingency fee basis would experience no cost or merely the cost of a small retainer
- it was felt that there are cases where legal costs to the plaintiffs do accrue, thus some provision must be made for the expense

The graphic representation of the situation is shown:

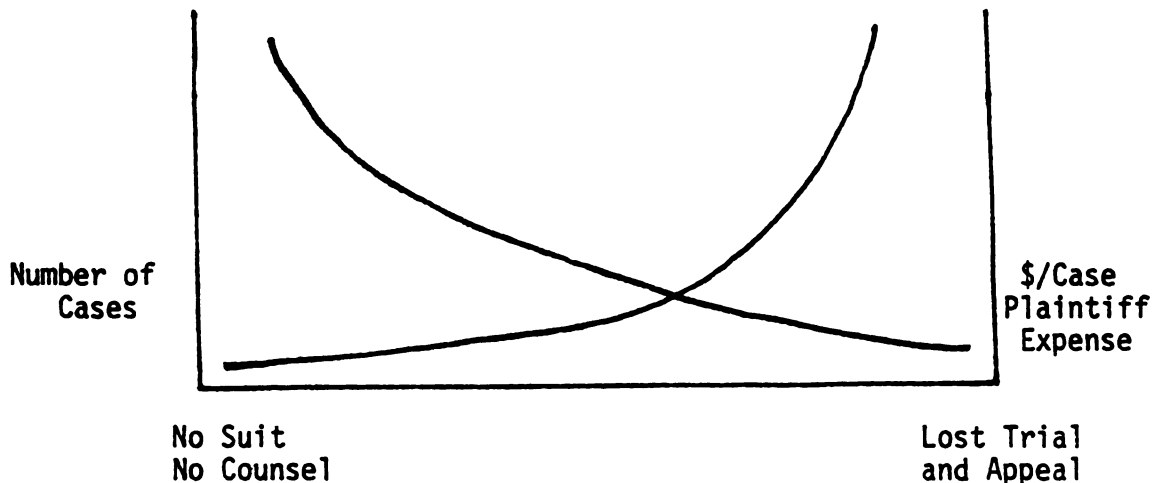


Figure 3--Degree of Legal Involvement.

Thus, an average of \$100/case for 22,260 claims without payment was estimated.

TOTAL \$2,226,000

16. Separation of Claims Paid into Consumer/Worker Categories--BI Only

a. Number of Claims w/Payment

47,740 Claims (9,211) 89.4 percent Consumer
10.6 percent Worker

or

42,680 Consumer
5,060 Worker

b. By total payments (000) (9,211) 58 percent Consumer
52 percent Worker

\$502,445 x .58 = \$233,418 Consumer
.42 = \$169,027 Worker

17. Separation of Claims Paid in C/W--PD Only

It is assumed that virtually all PD Claims are consumer oriented, thus \$67,088,000 are considered consumer payments.

18. Separation of Claims Paid into C/W--Combined (CO) Claims (000)

Since the exact distribution cannot be determined, the paid claims were split equally between the two categories. Thus

\$18,118 goes to

\$9,059 Consumer
\$9,059 Worker

19. Summary of Claims Paid Consumer/Worker (000)

	<u>Consumer</u>	<u>Worker</u>
BI	\$233,418	\$169,027
PD	67,088	-0-
CO	9,059	9,059
TOTAL	\$309,565	\$178,086

20. Separation ALAE into Consumer/Worker Segments, BI Only (000)

Assume ratio is similar to payments (.58, .42)

Thus $\$136,355 \times .58 = \$79,086$ Consumer

$\times .42 = \$57,269$ Worker

21. Separation ALAE into Consumer/Worker Segments, PD Only (000)

Consistent with Claims Paid, assumed all are consumer expenses

Thus, \$30,750 are Consumer

22. Separation ALAE into Consumer/Worker Segments CO Only (000)

As with claims split evenly, \$2,955 Consumer
\$2,955 Worker

23. Summary of ALAE Split between Worker and Consumer (000)

	<u>Consumer</u>	<u>Worker</u>
BI	\$79,036	\$57,269
PD	30,750	-0-
CO	<u>2,955</u>	<u>2,955</u>
TOTAL	\$112,791	\$60,224

24. Manufacturer Payment in Excess Coverage--C/W (000)

Again assume as ratio of payments:

BI $\$12,017 \times .58 = \$6,970$ Consumer
 $\times .42 = \$5,047$ Worker

PD assume all are consumer expenses, \$8,366

CO split between both: \$271 Consumer
\$271 Worker

25. Summary Manufacturer Payment in Excess of Coverage C/W (000)

	<u>Consumer</u>	<u>Worker</u>
BI	\$ 6,970	\$ 5,047
PD	8,366	-0-
CO	<u>271</u>	<u>271</u>
TOTAL	\$15,607	\$ 5,318

26. Carrier Legal Expense--Split Consumer/Worker (000)

Used ratio of Payments:

BI \$113,925 x .58 = \$66,076 Consumer
 x .42 = 47,849 Worker

PD all consumer--\$26,013

CO Split evenly: \$4,938 x .5 = \$2,469 Consumer
 x .5 = \$2,469 Worker

27. Carrier Legal Expense--C/W Summary (000)

	<u>Consumer</u>	<u>Worker</u>
BI	\$ 66,076	\$ 47,849
PD	26,013	-0-
CO	<u>2,469</u>	<u>2,469</u>
TOTAL	\$ 94,558	\$ 50,318

28. Manufacturer Legal Expense C/W (000)

Used ratio of payments:

BI \$5,696 x .58 = \$3,304 Consumer
 x .42 = 2,392 Worker

PD assumed all Consumer \$1,300

CO split evenly: \$124 Consumer
 \$124 Worker

29. Manufacturer Legal Expense C/W Summary (000)

	<u>Consumer</u>	<u>Worker</u>
BI	\$3,304	\$2,392
PD	1,300	-0-
CO	<u>124</u>	<u>124</u>
TOTAL	\$4,728	\$2,516

30. Plaintiff Legal Expenses C/W (000)

Assumed as ratio of payments (.58, .42)

BI \$80,974 x .58 = \$46,965 Consumer
 x .42 = 34,009 Worker

PD All Consumer--\$20,239 Consumer

CO Split evenly: \$2,040 Consumer
\$2,040 Worker

31. Plaintiff Legal Expense C/W Summary (000)

	<u>Consumer</u>	<u>Worker</u>
BI	\$ 46,965	\$ 34,009
PD	20,239	-0-
CO	<u>2,040</u>	<u>2,040</u>
TOTAL	\$69,244	\$ 36,049

32. Total Economic Loss C/W (000)

Assume payment ratio:

	<u>Consumer</u>	<u>Worker</u>
BI $\$315,772 \times .58$ $.42$	\$183,148	\$132,624
PD All Consumer	\$174,030	-0-
CO Split evenly $\$14,216 \times .5 =$	<u>7,108</u>	<u>7,108</u>
TOTAL	\$364,292	\$139,732

33. Payments Over Loss C/W (000)

	<u>Consumer</u>	<u>Worker</u>
Assume payment ratio:		
BI $\$300,738 \times .58 =$ $.42 =$	\$174,428	\$126,310
PD All Consumer	15,289	-0-
CO Split $\times .5 =$	<u>6,770</u>	<u>6,770</u>
TOTAL	\$196,487	\$133,080

34. Payments Under Loss C/W (000)

	<u>Consumer</u>	<u>Worker</u>
Ratio of Payments:		
BI $\$214,044 \times .58 =$ $.42 =$	\$124,146	\$89,898
PD All Consumer	\$122,338	
CO Split	<u>4,818</u>	<u>4,818</u>
TOTAL	\$251,302	\$94,807

APPENDIX C

Computation Detail of the 1976 Product Liability Model Funds Flow No-Fault System

Consumer

1. Consumer BI Claims w/o Payment

- a. Requirement: Separate (old) claims w/o payment into
 1. (NF) claims w/o payment
 2. (NF) claims w/payment
- b. Total BI Consumer/Worker claims w/o payment = 13,490
82.5 percent are consumer, thus 11,130 claims are consumer
- c. Assume a small number of claims will remain w/o payment even under No-Fault (NF). Possible reasons:
 1. insincere claims dropped by claimant
 2. lost litigation: failure to prove accident/product connection
 3. rejected by the minimum legal review process

Assume 10 percent remain as claims w/o payment. Thus,

10,017 of (old) claims w/o payment will be covered by NF
whereas,

1,113 will remain unpaid.

2. Distribution of Economic Losses Between Consumers and Workers on Claims w/o Payment

- a. Use ratio of Total BI payment 58/42 percent.
 $\$106,099 \times .58 = \$61,537$ Total Economic Loss
Consumer BI claims w/o payment (000)

From ISO Recomputed Table 5A

- b. Profile of Losses (5A, 195) \$ = 000,000

	<u>Percent</u>	<u>Dollar</u>
Medical	14.3	\$ 8.8
Wages	84.0	51.7
Other	1.7	1.0

3. Medical Loss--Claims w/o Payment, Consumer Only

- a. Based upon 75 percent of population have some form of medical coverage and allowance for deductibles on hospital coverage, it is assumed the 50 percent of the aggregated medical costs are covered by collateral source payments. Therefore:
- b. Since 10 percent of 50 percent is not recouped for claims remaining not paid, \$.440 is amount not paid (000)

\$8.8 Medical Loss Total
 4.4 Paid Collateral Sources
 .4 Unrecouped Loss
 3.96 Paid under NF

- c. A useful comparison for the chosen .50 factor on these medical payments is found in the Social Security Administration: Old Age, Survivors, and Disability Health Insurance data for Supplementary Health Insurance in 1975. The eligibles of this broad reaching federal program, as a group, receive 51.2 percent of their total medical expense generated for all causes, including accidents.

4. Wage Loss Analysis--Claims Not Paid--BI

11,130 Claims, \$ = 000,000. Total Wage Loss \$51.7 (Recomputed %A)

- a. It is assumed that one third of wage losses are coverage by collateral source payments, i.e., sick pay.
- b. Ten percent remain not paid. Summary:

\$51.7 Total Wage Loss
 -17.2 Collateral Source Offset
 - 3.4 Unrecouped Wage Loss
 \$31.1 Paid Under NF

5. Other Loss Analysis--BI (000,000)

- a. Assume only 10 percent is not recoverable.
- b. See (39, 132)

- c. Summary:

\$1.0 Total Other Loss
 .1 Paid Collateral Sources
 .1 Uncouped Loss
 .8 Paid Under NF

6. Claims w/o Payment--Consumer PD

- a. Assumed all PD claims are consumer
- b. Total PD claims w/o payment--8,236 (Table 3)
- c. Total Economic Loss From 6-1 Recomputed: \$62.6M
- d. Assume also 10 percent remain not paid under NF both dollar and number (see 39, 132)

Summary Loss:	\$62.6M
	6.26 Not Paid
	56.4 Paid under NF

7. Combined--Consumer Claims w/o Payment

- a. Assume all combined claims are consumer only--534
- b. Total Economic Loss--\$4.7M
- c. Again assume 10 percent not paid under NF
- d. Again assume one third BI paid via collateral sources
- e. Summary:

\$4.7 Total Loss
.3 Unrecouped Loss
1.6 Paid by Collateral Sources
2.8 Paid by NF

8. Claims with Payment--Consumer BI

- a. Calculations done by Range or set of Ranges--see Appendix B--Reconstructed ISO Table 5A for Range detail
- b. For each range or set of ranges, four calculations must be made:
 - 1. Total economic loss based on the portion of that range attributable to Consumer.
 - 2. Number and Dollar Loss for claims paid greater than economic loss.
 - 3. Number and Dollar Loss for claims paid less than economic loss.
 - 4. Number and Dollar Loss for claims paid equal to economic loss.

c. Sample Calculations: Range 1, Average Claim \$141

Economic Loss (000)

$$\frac{\$867^*}{\$132,122^*} = \frac{x}{\$315,772} \cdot .97; x = \$2.01\text{M Total Economic Loss}$$

↑
Ratio of
C/W in the
Range 1

*From (5A, 195)

Claims Total 18,742

Claims w/payment > L 11,789

Claims w/payment < L 1,574

Claims w/payment = L 5,379

With Claims now Total Economic Loss must be split into three components:

1. Payment for Claims G.T. Loss

$$11,784 \text{ claims} \times \$141 = \$1,662,000 \text{ (a)}$$

Payment G.T. Loss

$$\frac{\$579}{\$125,831} = \frac{(x) (.97)}{\$300,738}; x = \$1,324,000 \text{ (b)}$$

Thus if \$1.342M is the amount of payment over economic loss then the actual loss for these claims must be:

$$\begin{array}{r} \$1.662 \text{ (a)} \\ - \quad 1.342 \text{ (b)} \\ \hline \end{array}$$

or \$320,000 Actual Loss

2. Claims L.T. Loss

$$1,574 \text{ claims} \times \$141 = \$220,000 \text{ (a)}$$

Payment L.T. Loss

$$\frac{\$299}{\$39,558} = \frac{x}{\$214,044} (.97); x = \$693,000 \text{ (b)}$$

Thus, payment + payment L.T. loss equals actual loss

$$\begin{array}{r} \$220,000 \\ + \quad 693,000 \\ \hline \$915,000 \text{ Actual Loss} \end{array}$$

3. Claims Equal to Loss

5,379 claims x \$141 = \$758,000 Actual Loss

4. Summary Actual Economic Loss--Range 1

\$329,000	G.T.
915,000	L.T.
758,000	=
<u>\$1,993,000</u>	

- d. Collateral Source Payments computed same as for claims w/o payment.

The factor of .3542 was applied to Claims Payments throughout.

- e. Certain ranges were aggregated to reduce the large amount of hand calculations.

Claims Ranges 2, 3, 4 were combined

Claims Ranges 5, 6, 7 were combined

The rationale here is that the above groupings are in approximately the same order of magnitude both in claim size and number, thus little distortion was caused.

At range 8 and above, there were large order of magnitude differences. For this reason, each range was computed separately.

Calculations for Ranges 2, 3, 4 and up are not shown.

9. Consumer Property Damage Claims w/Payment

- a. PD calculations are roughly the same general approach as BI w/payments by:

--splitting into G.T., L.T. and Equal groups

--range and combined ranges grouping

- b. Assume, as in PD w/o payment, that only 10 percent of direct economic loss is recouped via collateral sources.

- c. Sample Calculation:

PD Claims Range 1	12,153
\$/Claim	162

Total Paid: \$1.969M

Payment G.T. Loss

Dollars over Loss

$$\frac{\$56,560}{\$6,165,184} \times \$15,280 = \$140,285 \text{ (a)}$$

Total Payment:

$$\$162 \times 1921 \text{ claims} = \$311,202 \text{ (b)}$$

Net Loss:

$$\begin{array}{r} \$311,202 \text{ (b)} \\ - 140,285 \text{ (a)} \\ \hline \$170,917 \end{array} \text{ Actual Loss G.T. Claims}$$

Payments L.T. Loss

Dollars L.T. Loss \$794,000 (a)

Total Payment:

$$2,412 \text{ claims} \times \$162 = \$390,744 \text{ (b)}$$

Actual Loss A + B:

$$\begin{array}{r} \$ 794,000 \text{ (a)} \\ + 391,000 \text{ (b)} \\ \hline \$1.185M \end{array}$$

Payment Equal Loss

$$7,820 \text{ claims} \times \$162 = \$1,269M$$

Loss Summary:

$$\begin{array}{r} \$171,000 \\ 1,185,000 \\ 1,269,000 \\ \hline \$2,265,000 \end{array}$$

10. Combined BI and PD Claims

Calculation similar and same ratios applied as BI

11. Allocated Loss Adjustment Expense--Consumer BI Claims

a. Claims Not Paid under NF or Tort

$$\text{Claims } 1,206 \times \$3,121 = \$3.764M, \text{ average ALAE}$$

\$3,121 used since it includes monies for suits won by defendants.

b. Claims Not Paid Under Tort but Paid Under NF:

Average NF Payment, \$2,960

Thus the arbitration ISO ALAE charge* was felt to fairly represent these costs:

$$10,854 \text{ claims} \times \$868 \text{ (ISO)} = \$9.421\text{M}$$

$$\begin{array}{r} \$9.421\text{M} \\ 3.764\text{M} \\ \hline \$13.185 \text{ ALAE Total Splits to:} \end{array}$$

\$11.22M Attorneys, 85.1 percent
1.96M Other, 14.9 percent

c. ALAE--NF; Range 1

Claims--18,742

Use "No Suit Filed" charge (ISO 14-3, 91)

$$18,742 \times \$25 = \$468,000 \text{ splits to:}$$

Attorneys (52 percent) = \$244,000
Other (48 percent) = \$224,000

d. ALAE--NF Ranges 2, 3, 4

Use Arbitration factor again for same reason

$$2,992 \text{ Claims} \times \$868 = \$2.597\text{M splits to:}$$

\$2.210 Attorneys, 85.1 percent
.387 Other, 14.1 percent

e. Up through Range 8 used Arbitration \$868 expense cost for ALAE

12. Allocated Loss Adjustment Expense Consumer PD Claims

a. Claims Not Paid Under Tort and Not Paid under NF

$$824 \text{ claims} \times \$934 \text{ (average cost)} = \$770,000 \text{ ALAE}$$

* As stated before, it is important to assume that some minimum process of legal review is required by the system for the establishment of fault. The minimum formal type of hearing or process is the arbitration hearing.

Average cost was used here to allow for claims which were carried through the extended legal process.

- b. Claims not paid under tort but paid under NF and Ranges
G.T. 1 used \$161 the ISO Arbitration figure (ISO 14-4, 92)

13. Combined BI and PD ALAE

Used ratio of ALAE to Claims in BI to simplify calculations.

14. Computation of Manufacturer Direct Payment

Is handled similarly to Tort System. No additional comment or amplification of procedure is required.

15. Consumer BI--Legal Expenses

Defense only--that portion of ALAE does not include additional expenses incurred by manufacturer.

<u>Claims</u>	<u>ALAE</u>	<u>Factor</u>	<u>Legal</u>
Not Paid Either	\$ 3.76	.8355	3.14
Paid only/NF	13.18	.851	11.22
Range 1	.468	.52	0.24
Range 2,3,4	2.547	.851	2.21
Range 5-19	57.41	.8355	47.24
	<u>\$77.02M</u>		<u>\$62.05M</u>

Factor from (ISO 14-3, 91)

\$62.05 = 82.7 percent of ALAE is Legal

16. Consumer PD--Legal Defense Only, the subset of ALAE

<u>Claims</u>	<u>ALAE</u>	<u>Factor</u>	<u>Legal</u>
1. Claims Not Paid by Either	\$.77	.863	.664
2. Paid NF Only	1.193	.863	1.030
3. Range 1	1.941	.863	1.675
4. Ranges 2,3,4,5	.515	.863	.444
5. Ranges 6,7	.140	.863	.121
6. Ranges 8-19	10.335	.85*	8.785
	<u>\$14.894M</u>		<u>\$12.719M</u>

*Composite of (14-4, 92); 85.4 percent Legal

17. Combined BI and PD

Rationale same as BI: 82.7 percent

18. Summary Legal Defense

BI	\$64.05
PD	12.72
CO	2.77
	<u>\$79.54M</u>

Add 5 percent for manufacturer additional legal expense, \$3.977

19. Plaintiff Legal Fees

Assumed to be equal to defendant: \$83.51

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