

## **Chapter 12 Underwriting - Objectives**

### **Major Goals of Underwriting**

Underwriting of all types is designed to accomplish these three major goals:

- It helps the company to achieve underwriting gains
- It contributes to society
- It assists in maintaining a strong, solvent industry, which can serve the public in the future

Each of these goals must be recognized and understood before changes in practices can be successfully adapted to the new regulations and pressures.

### **Underwriting Gains**

The first goal of underwriting is to help to achieve underwriting gains. In stock companies, these gains can be called "profits." With mutual companies and reciprocals, the gains result in increased dividends or surplus. In all cases, the goal is to be able to show a modest gain after losses and expenses are paid.

Underwriting contributes to these gains by selecting applicants who fit within the parameters of the rates which have been developed. Every rate structure contemplates a certain type or class of risk.

Underwriting has the responsibility of accepting and retaining those properties and exposures which fit the expected pattern. Underwriting gains cannot be achieved by accepting applicants whose probability of loss is greater than that which is anticipated by the rates.

Applying contract provisions, which are contemplated by the rate structure, can make a further contribution. Coverage cannot be unduly broadened, exclusions cannot be removed and conditions cannot be waived without jeopardizing the expected underwriting gains.

Rates, contracts and selection are closely related. Improper use of any of them can destroy all hope of underwriting gains. If any of the three is inadequate, one or both of the others must be adjusted accordingly or underwriting losses will occur.

Total responsibility does not fall on underwriters. Those who promulgate rates and those who draft contracts carry a share of the burden. But in the final analysis, it is the underwriter who must select applicants who fit the rates and contract provisions which are designed to produce underwriting gains. If artificial restraints are imposed on underwriting, either rate must be increased or contracts restricted. Otherwise, underwriting gains cannot be realized.

### **Contribution to Society**

Insurance contributes a great deal to society. In fact, it is difficult to imagine how this civilization could exist without insurance. Society benefits from insurance by the reduction in uncertainty which insurance provides. With this lessening of uncertainty, people can buy and furnish houses, establish manufacturing and processing firms, stock warehouses and retail establishments, and conduct the distribution of goods.

If this uncertainty was not reduced, people could not embark on these ventures. Perhaps more importantly, lending institutions would not be able to finance these enterprises, so anything beyond a cottage-type of business would be almost impossible.

Most of the recent strides in industrial and technological fields would have been unthinkable, and

most consumers would not have been able to accumulate the volume of goods which marks the affluence of society.

Insurance supplies a good share of the funds which finance long-term investments. The accumulation of capital, which is needed to guarantee the payment of future losses, can be used to promote expansion in home ownership as well as in business and industrial fields.

Another major benefit of insurance is the competition, which results from the stability and reduction of uncertainty, which is present in our economy. Small firms can compete with large enterprises because they do not need to accumulate large sums of money to help survive disasters. The protection given to insurance permits every firm to survive both heavy losses to property and claims for liabilities. Thus funds can be used for growth, and society benefits from the resulting competition.

Underwriters are the focal point through which most of the benefits of insurance are supplied to society. It is underwriters who arrange to protect almost every conceivable type of loss and in amounts of insurance which meet the needs of society. When new exposures to loss arise, underwriters develop methods of insuring those exposures.

A major contribution of underwriting is being certain that the insurance needs of society are met. This imposes a burden upon underwriters to conduct their operations in such a manner that society does benefit from insurance. Availability, affordability, capacity and solvency are some of the goals of underwriting.

Two important aims of underwriters are to support activities which will benefit society and to oppose changes which will tend to restrict these benefits. Not only underwriters must analyze the immediate results of changes but also their long-range effects.

Every underwriting action and every underwriting rule or guide should be considered in light of the ultimate effect on society as a whole.

Changes in society and in its demands are having an effect on underwriting practices. Adaptation to these pressures will be required if underwriting is to survive. The leader of a producer's organization, in a speech referring to the current mood of the "day of the consumer," said this:

"...The forces impacting on the industry will stimulate a review of its responsibilities.... some authorities believe that the insurance industry did such a great job of convincing people of the need for insurance that it is now regarded as a necessity to which the public is entitled. If insurance today is a social and economic necessity, then the industry has an obligation to society. While insurance products and services are needed, there is reason for improvement."

### **Maintain a Strong Insurance Industry**

The greatest contribution that underwriters can make to their companies and to society is to help maintain a strong and solvent insurance industry.

Underwriting gains, as discussed in the previous section, are an essential element in maintaining this strength. Another factor is steady, solid growth. This requires an analysis of markets and a selection of applicants who represent a broad, desirable spread. Still another element is an ability to meet the needs of buyers of insurance, for only in this way can insurance companies survive.

In all of these areas, underwriting contributes best when it classifies and accepts applicants on the basis of reasonable criteria which is equitably applied. A constant objective of underwriting must be to analyze selection standards, to change the standards and classifications when conditions require and to administer them fairly in daily activities.

Society benefits directly from the existence of strong and stable insurance companies. Only this type of insurer can meet the needs as described earlier. The future demands of a changing society will place new burdens on the insurance industry.

New energy requirements, advanced technologies, the challenges of space travel, the opportunities for increased leisure activities, the opening of markets in undeveloped lands and all of the other possibilities which will be presented by the brave new world to come—all will require even more insurance protection than is available today. A strong, solvent insurance industry is a necessity if artificial brakes are not to be applied to these many new possibilities for fortune and growth.

The future of underwriting is the analysis of characteristics of applicants in order to find meaningful factors upon which to base underwriting selection. This is the challenge of the future for underwriters. Laws and regulations will impose new rules. Pressures will cause others to lose their effectiveness. But underwriting must survive if a strong insurance industry is to exist. This will require adaptation by underwriters, through the use of revised approaches, which will achieve the established objectives.

The Chairman of the Texas Insurance Board, in speaking about the related subject of rates, made this thoughtful statement, which applies to all aspects of insurance:

"It is as important to guarantee the consumers of this state a strong, viable insurance industry as it is to guarantee equitable rates. No artificially suppressed rate can ultimately be beneficial to our state's policyholders."

### **Underwriting in Response to Regulation**

Underwriters can react in many different ways to rules and regulations that are adopted. If they do not consider carefully the ultimate consequences, they may react in ways that will damage their reputations. In the long run, the damage will be irrevocable and will affect the entire insurance industry.

The only truly viable alternative is to underwrite with more applied intelligence and knowledge. This will include securing more facts, evaluating applicants as individuals, making objective analyses and taking prompt action in conformity with the laws and regulations.

As a starting point, underwriters must know why certain rules or guides were used in the past. For example, the applicant's occupation was not a factor because there wasn't anything wrong with people who were engaged in certain occupations.

They were not wicked, dishonest nor abhorrent. Rather, experience has shown that persons in certain occupations tended to be unstable. They moved around a great deal.

This instability can be a problem to insurers, so caution was used in accepting applicants who were engaged in certain occupations. The occupation should not have been a firm rule but just a guide (although it is likely that some underwriters used it as an unacceptable factor).

Suppose that occupation is prohibited as a factor in underwriting. The instability of the applicant may still be a problem. If this is discovered to be the case, the application may need to be rejected. The reason for the rejection is not occupation, but instability. The latter can be indicated by factors other than occupation and may need more investigation to discover.

Occupation cannot be used as a reason for underwriting action, but it can still point out the need for more facts, which may make the application unacceptable. If unstable conditions are not found, and other factors are not present, the application should be accepted.

## **Obtaining Objective and Subjective Information**

The key to better underwriting is to secure all relevant information. No longer will it be enough to find out a few facts, such as occupation, and then take action.

Both objective and subjective material can be secured, depending upon the circumstances and the management of the insurer.

**Objective information** is the most reliable data is that received from objective outside sources. Motor vehicle reports and accident information from the file is the most common for vehicle insurance. The condition of the property, photographs, a doctor's report of physical impairments and the length of driving experience are other examples for various lines.

**Subjective information** is purely personal and private information that may be used under some circumstances. Ordinarily, this is best if secured from the applicant, not from outside sources. After all, what a friend or neighbor says about an applicant should be accepted with a grain of salt. The application, telephone verification and a renewal questionnaire are devices which are used to get facts from applicants and policyholders.

Some insurers have used psychologically oriented self-completion questionnaires as investigative tools for new applicants, particularly for personal automobile insurance. Some of these sources may arouse antagonism from applicants or producers, but they are illustrations of the sources that are available.

Right to privacy laws and other restraints imposed by government can restrict the information which can be secured. This situation only makes the underwriter's job more difficult and requires more innovation to locate permissible data.

## **Analyzing Information**

The first step in underwriting still requires the securing of as much relevant information as is necessary or available. The second step is analysis of the information. There are two different ways of looking at applications: by class and by individual risk.

Traditionally, personal lines have been subject to class underwriting. This means that classes or groups are identified as being problems and are not written. Underwriters recognize that some individuals in each class would be acceptable.

However, it would be more expensive to locate them, and there is usually not much information readily available upon which to make the decision. If an exception is made and a loss occurs, criticism may result. On the other hand, there will be no criticism if the applicant is rejected.

Commercial lines more commonly use individual risk underwriting. More complex factors are present, and premiums are high enough to permit more investigation. In most companies, certain groups have been identified as presenting problems, and these may be on an unacceptable list.

Still, exceptions are made for meritorious applicants based on individual characteristics. This pattern is common among larger commercial risks: smaller ones may be handled more on a class basis.

This traditional difference between class and individual risk underwriting is disappearing in today's social and regulatory climate. People no longer tolerate being handled as members of a class without regard to individual characteristics.

Many of the laws and regulations are aimed at precisely this factor. Since some physically impaired people are good drivers, it is no longer permissible to reject them simply because other physically impaired people may be problem drivers.

Rather, the rules prohibiting the use of certain characteristics require that each person be considered on the basis of individual factors alone.

The analysis of applicants, under government regulations, must include a study of individual characteristics, not just the group to which the applicant belongs. This does not necessarily involve a great deal more time and expense.

Instead, it takes only a little more effort to consider if the applicant is different, in some relevant way, from the other risks of the same type. If so, the differences must be analyzed.

This type of analysis is new for most underwriters, particularly those handling personal lines. Education, training and frequent audits will be needed.

## **Making a Decision**

The third step in underwriting is to make a decision and take action. This can be a perilous part of the process, or it can be a golden opportunity to serve the public and the industry.

The manner in which underwriting guides are written and the way that the reasons for adverse action are stated can be very important. This is the point at which the true intentions of the companies are measured. Underwriters should avoid using words like "location," "sex," "age" and "marital status" when rejecting or canceling insurance. These may be factors to be considered in the evaluation, but they cannot be used as the primary reason for rejection. Reasons must be given, and these should be specific.

Underwriters must stop using such general terms as "condition of the property." The public insists upon knowing why adverse action is taken. The reasons must be clearly explained. Action must be taken promptly. Restrictions place a burden on underwriters to avoid procrastination. Many states prohibit cancellation of new policies after a "discovery period"—usually about 60 days.

Non-renewals are often permitted only if notice is sent to the policyholder well in advance of the expiration date. These rules require prompt and firm action, preventing the delays which previously marked the decision-making process of some underwriters.

In summary, underwriters must avoid the specific use of factors which are prohibited, although these factors may be used as indicators along the path. Applicants and policyholders must be analyzed as individuals, not as members of a class or group. Actions must be taken promptly and always in compliance with the laws. Rejection or cancellation may be taken only for relevant reasons, and never because of factors, which are prohibited. The reasons must be explained in specific terms.

The previously mentioned are the general approaches, which must be followed by underwriters under government restraints. As a first step, management of the company should outline general principles, indicating how underwriting is to be conducted.

These principles, which should be stated in broad terms, will give the necessary guidance to underwriters.

It is obvious that compliance with all laws and regulations should be the cornerstone of these principles. Then, general statements are needed as to the degree of investigation to be followed, the method of communicating decisions and the handling of complaints. Such a statement of principles will supplement the underwriters' knowledge of general approaches to be used and will provide a broad base of guidance for future underwriting.

## **Specific Practices**

Desk underwriters need specific instructions on practices to be followed when they encounter situations of the types described in previous sections. While general statements are helpful, they are inadequate for the day-to-day handling of individual risks.

Statements of general principles must first be developed and adopted by insurance company management. Such statements are needed before desk underwriters can make decisions which follow the wishes of management. Without such statements, underwriters can be expected to continue the old practices which have led to the current atmosphere of criticism and demands for change.

Desk underwriters, using the statement of principles, must make decisions on individual risks. This is the focal point of all of the sound and fury being heard throughout the country. This is the level at which the decisions are made on individual risks. If those decisions are in compliance with both the laws and the expectations of the public and the regulators, all will be well. If they are not, further restrictions will be imposed. Those restrictions will have an even greater impact on the ability of insurers to decide upon the types of business they wish to write.

Underwriters must learn of the laws and regulations affecting the insurance being considered. Controls must be established to be certain that both new and existing laws and regulations are communicated to all underwriters. Next, supervisors must conduct enough audits to be certain that desk underwriters are following all of the applicable laws and regulations.

Much more than this is needed, however, if underwriting is to survive as it is known today. The spirit as well as the letter of laws and regulations must be followed. Most rules have loopholes if someone looks hard enough for them. If underwriters find loopholes in laws or regulations and underwrite on that basis, further restrictions will be adopted to close the loopholes.

Complaints and criticisms must be heard. When reasonable adaptations to underwriting practices can be made to meet those objections, this should be done. Not every complaint must be met, or no underwriting could exist for long. The problem is to separate those that are reasonable and logical from those that are not. The application of these principles will not be easy. The reasons for each type of criticism must be known. The old practices must be modified in many respects.

## **Loss History**

Underwriters considered the history of past losses to be the best predictor of future losses. A basic and very important part of underwriting is the estimation of an applicant's future loss potential. The record of past losses was secured whenever possible, and the losses were analyzed carefully.

For vehicle insurance, the accident record was used. For other liability and property exposures, the record of past paid losses was the best source. In all cases, the underwriter analyzed both frequency and types of losses.

From these studies of past losses, many underwriters prepared rules or guides on the maximum number of losses that were permitted in order for a risk to be acceptable.

## **Accident Record**

In auto insurance, the accident record of the driver was the most important. It affected the underwriting of many personal and commercial risks. Several statistical studies have verified what underwriters had asserted for a long time: a driver who has had accidents is more likely to have a future accident than a driver who has not had an accident. Furthermore, the more accidents a driver has had, the more likely it is that he or she will have future accidents.

The most recent three-year period was ordinarily used in statistical studies, as well as in underwriting. However, an underwriter was interested in trends and patterns and would give some consideration to a longer period of time if the information was available.

## **Accident Rates**

Statistics demonstrate that, as a group, drivers having accidents during one time period are substantially more likely to have accidents in a future period. Underwriters, unable to determine precisely which drivers would have accidents, tended not to accept those who had shown, as a class, that they would have more accidents in the future. Accordingly, the practice was to reject a driver who had incurred prior accidents.

The actual number of past accidents that were permitted depended on the rate structure and market orientation of the company. Whatever the number, underwriters tended to make a first screening by the accident record.

## **Fault**

One refinement sometimes used was whether the applicant had been at fault in the accident.

Studies of accidents, such as those conducted by the California Department of Motor Vehicles, include all losses, so there is no distinction between at-fault and other accidents. Actually, some people who study these factors feel that most accidents could be avoided by proper defensive driving - leading to the conclusion that even those drivers not charged with responsibility for an accident could have avoided it in many cases. The next time, they may be held to be partly at fault, or the other driver may be uninsured, so a bodily injury payment must be made under Uninsured Motorists coverage, regardless of fault.

Finally, since the Motor Vehicle Reports (MVR) do not show fault, there is no means of determining the facts short of getting a copy of the police report, which is time consuming. The only alternative is to accept without question the statement of the applicant, who is naturally biased and ordinarily unwilling to admit to fault. For these reasons, many underwriters did not consider the question of fault in an accident.

The number of past accidents over a period, such as two years, has been a fundamental guide to automobile underwriters. Often, the number of accidents was counted without regard to such refinements as severity or type because those factors did not appear to be as important a fact as accident involvement.

The MVR is the primary source of information concerning past accidents. Some information is received from questions on the application, but this was generally felt to be unreliable because people forget dates and circumstances and are inclined to minimize their own past errors.

An inherent weakness of the MVR is the fact that it reveals only accidents that are reported to the department of motor vehicles. Many accidents are never reported. An accident that results in no bodily injury and only minimal property damage does not need to be reported. Even excessive losses might not be reported if the parties so agree and no law enforcement officer is involved. An accident that occurs on private property does not need to be reported. An accident that occurred in another state may not appear on the MVR, although all states are supposed to exchange such information. Finally, some state recording of accidents is so slow or of such poor quality that the MVR reports are of questionable accuracy.

Thus, the MVR does not give all of the factual information about accidents. The underwriter, knowing the importance of complete information and predictability of future accidents based on past accidents, would try other sources. The previous insurer should have all accident data on file, so arrangements can be made to exchange such factual material. Neighbors of the applicant usually are aware of accidents, and inspection reports may elicit information from them.

Traditional underwriting practices, therefore, used all available sources to learn about past accident involvement of all drivers in order to avoid the writing of those risks which had incurred

more than the allotted number of accidents during the past specified period.

### **Traffic Violations**

The traffic violation record of drivers was almost as universally used as the record of accidents. In some instances, violations were even more important, especially for commercial risks.

Statistical evidence again supports the suspicions of underwriters that a driver who has had violations is more likely to have future accidents than a driver with no violations. The number of occurrences, as with accidents, indicates the likelihood of accidents in the future.

Two terms are used somewhat interchangeably by underwriters. "Citation" means that a motorist has been cited by a law enforcement officer for an alleged infraction.

"Conviction" means that a court has found the motorist guilty or that the motorist has forfeited bail, which is tantamount to pleading guilty. Both of these terms could be called "traffic violations."

The difference is that some people who receive citations may be found not guilty and thus receive no conviction. To the extent that this occurs, underwriters should not use citations because some of them may not result in convictions, which would imply that the person involved was not at fault in the violation.

As a matter of practice, underwriters tended to use whatever was available. If both citations and convictions could be determined, the latter were used. If only citations were available, ordinarily they were used, without the expensive process of learning if an actual conviction resulted. The daily conversation of underwriters may have used either term, without implying that one or the other was more likely to be used in underwriting.

### **Types of Traffic Violations**

Traffic violations come in varying degrees, from very serious to harmless. Underwriters, in an effort to develop a workable arrangement, tend to divide violations into the following three groups:

**Major:** These are the most serious. Drunk driving is the most common. It is customarily called DWI (driving while intoxicated) or DUI (driving under the influence of intoxicating beverages). Also included are such violations as reckless driving, hit-and-run, involuntary manslaughter, driving while a license is suspended or revoked and engaging in a speed contest on public roads.

**Other Moving Violations:** The bulk of the remaining violations are in this group. Included among them are speeding, improper turns, improper lane changes, tailgating, failure to yield and failure to stop for a traffic control device.

**Equipment Violations:** These are citations issued for defective lights, improper equipment, no inspection sticker and similar violations.

Underwriters would look at the kind of violations, the frequency and the time period. For example, one major violation might have been permitted during the past five years, but none in the past three years. Not more than two other moving violations may have been permitted during the past three years.

Equipment violations seldom were included in rules, but they do give an underwriter a clue to the maintenance of the vehicle and the responsibility demonstrated by the owner.

"Accident Rates by Number of Accidents in a Prior Period"

Law enforcement activity varies among the states. Some state patrol departments are more active, and more inclined to give citations than others. An underwriter tried to learn of the



practices in those states that his or her office handled, and to take this into account when judging the weight to be given to citations.

However, any frequency of citations was a cause for underwriting concern. If some states give few citations, and most drivers seldom are cited for their infractions, it was even more serious when an applicant showed a long string of citations. Some underwriters considered citations to be more important than accidents because an accident can be subject to such outside influences as weather and road conditions, while citations are issued only if the driver violates a law.

There is seldom any means of discovering a traffic violation record other than with an MVR. However, tendencies toward speeding, reckless driving, "jackrabbit starts," and other unsafe practices are usually known by neighbors. The traditional underwriter sometimes ordered an investigation report, requesting specific information on such practices from neighborhood informants. A tendency toward unsafe driving, whether it's demonstrated by citations or not, is cause for concern to the underwriter and it is considered to be good underwriting to use the complete driving record in the selection process.

### **Non-verifiable Record**

One problem with the driving record remained. The underwriter was sometimes unable to acquire the driving record, either because it was unavailable or because the driver was newly-licensed. Judgment had to be used in these cases.

A driver who recently moved into the state should have had a record available from the previous state. The former driver's license number was usually requested, so that an MVR could be ordered from that state. But what about a driver whose record could not be secured? For instance, picture an applicant who had just returned from a three-year stay in Saudi Arabia, where he/she worked in the oil refineries. He said that he/she had no accidents or citations, but how could the underwriter verify this? Was it proper to write such a risk at the preferred rate?

Consider another applicant, one who had only recently been licensed (usually this was a youth, but sometimes older people do not learn to drive until later in life). With no record, could the underwriter assume that the record would be clean during the coming year? In cases like this, underwriters often applied a surcharge as a means of protection against the unknown exposure or used this as one factor in the selection process. Both non-verifiable driving records and newly licensed drivers were considered to be factors of concern to underwriters.

### **Property Losses**

The record of past losses of the types for which coverage was requested was important to property underwriters. For example, on homeowners' policies, information was desired on past fires, windstorm damage, thefts, vandalism and other perils, if included in the policy.

Unfortunately, the somewhat accurate information that can be secured on accidents incurred by automobile risks is not available to underwriters for other lines. There are no studies by government bodies that indicate the average loss expectancy of dwellings and commercial risks. Also, no government body collects or disseminates information about past losses.

The claims files of an insurer could be used by an underwriter in an attempt to determine expected loss frequency and the effect of past losses on future claims. Underwriters did make such studies, although the results were seldom conclusive. The best conclusions seemed to be that a condition that caused past losses would, if not corrected, cause future losses. Inadequate wiring, a worn roof and a pattern of burglaries in the neighborhood would be cause for concern as to future loss expectancy.

The problem of how to find out about past losses still remained. An underwriter could use the company's claim records on policies that had been on the books for a period of time. On new

business, there was no equivalent to an automobile insurance risk MVR. Most applicants were asked about past losses, but underwriters considered their answers unreliable.

The only solution was to secure the actual loss information from the previous insurer, and a practice developed of exchanging such information. This practice was similar to that used by automobile underwriters to secure information on losses that were not reported to a department of motor vehicles. By reciprocal arrangements, underwriters could exchange facts about losses on policyholders.

Property underwriters seldom established rules as to the number of losses which were permitted. Rather, they weighed the numbers and types of losses against other factors.

The type of loss was particularly significant. A fire from inadequate wiring probably would be repeated unless the wiring problem was corrected. A small loss from negligence, such as from a cigarette in a sofa or from a grease fire in the kitchen, might well have been a large loss under less fortunate circumstances, and the next one might be a total loss.

On the other hand, a series of unrelated or relatively uncontrollable claims might not be a cause for concern. An example is a theft of a bicycle from the yard, a hailstorm that marred the paint on one side of the house and water from a stopped-up sink, all which occurred within a period of three years.

Commercial property underwriters followed similar practices. They secured information on past losses from any available source and weighed the factors without establishing firm guide rules.

## **Liability Losses**

Personal or commercial liability losses were handled in the same way as property losses. Again, no government source was available for analysis or as a source of information. Facts about past losses were often secured from prior insurers. The frequency and types of losses were analyzed and a decision was made, using no specific rules.

On personal lines, the degree of control and the steps taken to correct the situation were the most important. A vicious dog, an unfenced swimming pool and a broken step on the front porch are examples of hazardous conditions that an underwriter might have used as reasons to reject a risk, if uncorrected.

On commercial lines, different occupancies caused more varied hazards, but they were handled the same way as personal lines. An underwriter would be concerned about slip-and-fall claims in a market, loose carpeting in a restaurant and blind intersections in a shopping center. As with other types of losses, the aim was to find the previous loss pattern, analyze the causes, determine the corrective steps taken and compare this information with other factors before arriving at a decision.

## **Underwriting the Lines of Insurance**

The previous discussion concerning driving records was concerned primarily with private passenger automobiles because it's an easier way to convey the use of such information in underwriting. However, the driving record of an applicant can be used in underwriting of other lines of insurance, commercial and otherwise. In this section, we'll be discussing that as well as other factors used in underwriting.

### **Commercial Lines**

The driving record was considered to be as important on commercial vehicles as on personal vehicles. A truck driver who had several accidents or received several citations would not be considered as good a risk compared to one whose record was clean. The most common rebuttal was that most truck drivers drove many more miles than the ordinary person and were more

likely to have accidents or receive citations. This argument was refuted by the existence of many truck drivers with excellent driving records, despite the larger number of miles driven.

Not only did underwriters use the commercial driving record in reviewing commercial risks, they also used commercial accidents and citations in personal underwriting and vice versa. A driver who had problems while driving a truck for work would most likely have the same problems driving his personal automobile. Similarly, the type of driving that would cause accidents in a personal car would also cause accidents in a commercial vehicle. Many state MVRs did not show the type of vehicle, so all underwriters tended to use the complete driving record.

### **Boats**

The driving record on a vehicle tended to demonstrate the attitude of the boat operator toward safety and the rights of others, underwriters felt. Thus, the operation of a boat would be subject to the same personality traits that affected the operation of an automobile. For this reason, the automobile driving record, as shown by the MVR and other sources, was used by boat underwriters. Another consideration was the boat's power. The more powerful the boat, the more the concern the underwriters gave to the driving record.

### **Dwellings**

The link between the driving record and the maintenance of a home was less direct. However, underwriters felt that the attitude of a person toward owned property was demonstrated by the driving record. A person who drove with reckless abandon would tend to maintain a home in the same manner. Since maintenance of the home was an important factor in the underwriting of residential fire insurance, the driving record was one consideration used in some cases.

### **Condition of Property**

Although the attitudes and habits of the insured were of primary importance for the underwriting of most insurance lines, the condition of property was not far behind. Almost all types of insurance involve property in one way or another, whether it is a vehicle, a building, or personal property. Underwriters were concerned when the property was not maintained in good condition because this not only led to more losses on the property, it also indicated that a person lacked responsibility.

### **Condition of Automobile**

A vehicle that was in poor condition, perhaps with non-repaired damage, was usually unacceptable to most underwriters. You've likely seen these cars on the road – the plastic sheet window, red-tape tail light replacement, missing back bumper, or dented door are all examples of non-repaired damage that an underwriter may frown upon.

Physical damage coverages could not be written because of the difficulty of determining whether new or old damage needed repair after a loss. But liability coverages were also refused in many cases on the grounds that the car's poor maintenance showed that the owner was not interested in presenting a good appearance, which could give an unfavorable impression to a jury in case of a lawsuit. Furthermore, an owner who was not interested in the appearance of the vehicle was probably not interested in its mechanical maintenance, which could lead to accidents because of faulty brakes or steering.

The opposite of poor maintenance was also a concern to underwriters of vehicles. These were the cases when owners would paint or otherwise alter the vehicle in a manner that would either make it a show-off car, a high performance car, or both.

Many types of alterations were used: decals, "mag" wheels, wide tires, raised rear ends and other enhancements. Sports cars were the earliest and most often involved, but vans and pickup trucks were soon altered in similar fashion.

The problem to an underwriter was that these people exhibited strong show-off tendencies, which could lead to taking unnecessary chances and careless driving. Underwriters also felt that if the power of an engine was increased, that power would be used, which could be dangerous.

### **Condition of Buildings**

A building that was poorly maintained was unacceptable in many cases. The appearance of a building gives a good indication of the attitude of its owner or occupant. A lack of concern is indicated if a dwelling needs paint, has broken windows or has a yard littered with old tires or abandoned cars. It was felt that such an occupant would not properly maintain the electrical or heating systems of the home, and this neglect could lead to losses. The same feeling applied to commercial buildings.

"Pride of ownership" was a phrase used by underwriters to indicate a desirable situation. It indicated that the occupant or owner desired to maintain the appearance and condition of the building. Where "pride of ownership" was present, the risk was usually acceptable for fire insurance.

Even automobile insurance was affected by the condition of the building. Underwriters reasoned that the same attitude that caused a person not to care about the appearance or condition of a dwelling would be reflected in driving habits.

A person who was not concerned about the effects on other people of poorly maintained property would not be concerned about their rights on the highway. Safe driving is largely a matter of attitude, so underwriters tended to not accept automobile applicants who demonstrated a poor attitude toward their property and neighborhood. Some automobile insurance was rejected because of the poor maintenance of the dwelling in which the applicant lived.

## **Risk Factors**

### **Age of Buildings**

The age of a building is an important factor in its condition. After a few years, buildings can present problems from worn-out and obsolete systems. Electrical circuits deteriorate, and the addition of much new equipment such as appliances in a home can result in an overload. Heating systems wear out and controls can fail, which could lead to losses. Plumbing systems deteriorate and can cause losses under policies that insure water damage. Unless the electrical, heating and plumbing systems are modernized, underwriters may not accept older buildings.

"White elephant" is the term used to describe a building designed for an occupancy that is no longer efficient or practical. Such a building is relatively old, having seen the area around it change. One example is a dwelling in an area that is now so completely commercial or industrial that it is not suited for residential occupancy.

Another example is an old commercial building that has not been remodeled to handle current technology and really cannot be adapted economically. Every large city has examples of old manufacturing plants that cannot meet today's air pollution or energy-efficient standards and that would cost more to adapt than to build a new plant.

Underwriters were cautious in handling such risks because an extreme moral hazard could be created when a building is worthless as it stands. The owner may actually be better off financially if the property is destroyed rather than maintained. This situation created a classic moral hazard that might have made the risk unacceptable.

The age limit used by underwriters depended somewhat on the territory. As a general rule, dwellings over 25 years of age were written cautiously, and those over 50 years were handled with extreme care. Commercial buildings were given more latitude, but the same concerns were

present.

Inspection reports were ordered frequently on older buildings in order to secure information about condition and upkeep. Photographs were also common, either in conjunction with an inspection report or with the application on all buildings over a specific age. The ordinary inspection reports and photographs gave information on the general condition of buildings, but did not answer the critical questions about electrical, plumbing and heating. Only a complete engineering type of report gave good data on those items, and such a report was too expensive to use on dwellings and small commercial buildings.

For the above stated reasons, underwriting guides usually contained a specific age beyond which risks would not be written. Experience had taught underwriters that older buildings often presented abnormal hazards, and it was too expensive to secure reliable reports that would indicate if the conditions actually existed in specific risks. Many older buildings would not be acceptable, so the class was placed on an unacceptable list. Exceptions would be made only in extreme cases.

### **Value of Buildings**

The value of a building depends upon its size, age, location and type of construction. Values can be quite low where there is a combination of great age, small size and substandard construction. On dwellings, any one of these factors can result in very low market value and actual cash value.

A good clue to the desirability of a building is its valuation. A low value may indicate an old structure with the inherent problems described above. A minimal amount of insurance may reveal that the size of the building is small, which increases the likelihood of total loss. Also, low value may be caused by construction that does not comply with current code requirements or by the use of substandard materials.

On dwelling and homeowners' policies, the replacement cost provision is included in almost all forms. A requirement of this provision is that the dwelling be insured at least 80 percent to replacement cost. An older structure usually has a substantially lower actual cash value than replacement cost. For example, a 35 year-old house may have a replacement cost of \$100,000, but an actual cash value of \$50,000. Even at 80 percent, the minimum to replacement cost is \$80,000, which is \$30,000 more than the insured might expect to receive in a sale.

It was generally accepted that such over-insurance created an invitation for arson, and the moral hazard was considered to be too great. For this reason, underwriters would not write these policies on dwellings where the disparity between replacement cost and actual cash value was too great. Sometimes the rule took the form of a blanket prohibition on homes over a certain age, as a simple means of achieving the desired result.

Valued policy laws created special problems on valuation. In states where they apply, they raise the specter of over-insurance because they require payment of the policy's face amount in case of a total loss. A moral hazard is thus created in some instances because a property owner can actually collect more than the value of the property by purchasing insurance for a higher amount. In those states, underwriters were careful about the amount of insurance, and sometimes refused to write coverage where they suspected that over-insurance might be present.

### **Occupancy of Buildings**

The type of occupancy had a substantial effect on the desirability of a building, as it was seen by underwriters. The occupancy could substantially increase the chance of loss, so certain occupancies were on the unacceptable list.

On dwellings, owner-occupied homes were considered to be preferable. Tenant-occupied homes were underwritten very cautiously, and vacant structures were on most lists of undesirable risks.

Business occupancies in a home were not accepted in many companies, and underwriters even rejected any dwelling where the hazard was increased by such hobbies as picture-frame making, furniture refinishing and antique collecting.

On commercial risks, the occupancy is obviously an important factor of desirability. Even in this class, however, underwriters often tended to list many occupancies as unacceptable, without considering that the risk could be reduced substantially by the use of fire walls, segregated operations, automatic fire extinguishers and other protective measures.

Protective devices can be used to improve almost any building. Fire alarms and burglar alarms are effective in all structures. Smoke alarms are helpful in dwellings. Burglar alarms, dead bolts, barred windows and similar measures can help to prevent theft losses in both commercial and dwelling buildings. Fences and walls can help liability exposures where there are such hazards as swimming pools.

Underwriters used inspection reports to obtain information on occupancy and protective devices. Full inspection reports were used, with information secured from neighborhood informants or from the insured. Producers were asked to secure data, and photographs were required in some cases. Even drive-by inspection reports gave some information on occupancy and other important factors.

## **Neighborhood**

Even though the condition of property was faultless, a risk might be undesirable because of the neighborhood in which it was located or garaged. Thefts, fires and vandalism can cause damage to property, no matter how well it is maintained. The environmental hazard is important in almost every line of insurance.

A stable or improving neighborhood was desired by underwriters. A deteriorating neighborhood pointed toward so many problems that acceptability lists often specified them, either by a general description or a specific delineation of a territory.

"High-crime" and "urban core" areas were other terms used to describe deteriorating neighborhoods. In such areas, automobile theft and vandalism is high, particularly if the vehicle is not kept in a garage at night. Thefts from dwellings, vandalism to homes and even fires in residential property can be caused by the conditions in the neighborhood, regardless of the maintenance and housekeeping of the dwelling itself. Robberies in such commercial occupancies as liquor stores and gas stations generally are more common in these areas, and theft from warehouses and other occupancies is greater.

A neighborhood can be a hazard to property, even if it is not of such a nature that it could be called "deteriorating." A dwelling in a commercial neighborhood is more likely to be damaged by fire from an explosion in a nearby chemical factory or a fire in a neighboring lumber yard. If the neighborhood is a forest or brush area, a building can be exposed to serious fire losses.

These increased hazards were recognized by underwriters. Experience with risks that were exposed to such chances of loss was enough to convince an underwriter that the rate did not contemplate such exposures. Rules were adopted that prohibited the writing of risks that were garaged or located in hazardous areas. These rules applied to automobile, dwellings and commercial risks, and for most types of policies.

## **Age**

Automobile and commercial vehicle insurance is affected by the age of drivers. Even homeowners' insurance may show different loss patterns by the age of occupants.

## **Youthful Drivers**

Youthful drivers are involved in a substantially higher rate of accidents than are all drivers. Drivers under age 30 comprise 33.9 percent of the motoring population in the United States but are involved in over half of all accidents.

Traffic fatalities also are considerably higher for youthful drivers than for the average, according to data compiled by the National Highway Traffic Safety Administration and the Department of Health, Education and Welfare. The Highway Users Federation analyzed the data and stated this:

"...In applying U.S. Census Bureau projections...the traffic fatality rate per 100,000 population was 53.3 for 18 year olds, more than two and one-half times the national average of 21.1 for all ages. The only other age with a fatality rate greater than 50 was 19 year olds, with 51.7 per 100,000..."

### **Elderly Drivers**

Elderly drivers have also presented problems. As a person's reflexes slow, their ability to react is reduced. As muscular flexibility drops, an elderly driver's ability to look back while changing lanes or backing out of a parking space is reduced. Probably every driver will some day be a problem, unless death intervenes before that time or the person stops driving.

One of the conclusions of the UCLA-DMV Driver Vision Research Project, was this:

"...mileage is a factor related to accidents. When the accidents are adjusted by miles driven...we find that older drivers have high accident rates per exposure unit. The adjustment of accident rates by mileage results in the younger and older drivers having the highest accident rates, where the middle-age drivers have the lowest."

Furthermore, the director of the California Department of Motor Vehicles was quoted as saying this: "Notwithstanding that older motorists drive less, and compensate for their handicaps by greater caution, the accident involvement of drivers over 75 is almost as great as that of drivers under 20. Insurance companies know this. Their reluctance to renew the auto insurance of the elderly accounts, as much as anything, for older people giving up driving."

According to the above article, the four principal handicaps of older drivers are "diminishing vision, hearing, reaction time and reduced ability to understand complex traffic situations."

Another research project on elderly drivers which concluded: "All groups in the automobile insurance industry are in agreement that senior drivers present a serious problem today. There is every indication that the problem will increase sharply, if for no other reason than the increase in the number of potential senior drivers.

"While senior citizens must be defined in terms of the commonly used chronological age bracket of 65 years or over, it is apparent that functional age would be a more accurate criterion in evaluating the physical abilities of a senior citizen. It is true that gradual deterioration of body functions begins at birth and gradually becomes more pronounced in differing degrees for each individual. At present, there is no suitable method of measuring gradual physical body breakdown. Thus, it is necessary arbitrarily to categorize the senior citizens as being 65 years of age or older."

Faced with conclusions like these, underwriters naturally tightened up the acceptability rules for senior drivers. At the same time, surcharges were imposed for operators over age 65, sometimes in steps as the age progressed.

Most automobile insurance rating plans have reduced rates for lower annual mileages. Since most elderly people drive fewer miles, they got the lower rates. However, as indicated previously, their accident rate is high when compared with mileage. Thus, the results were poorer for this age group.

### **Age Restrictions**

Underwriters used age restrictions as a means of controlling the problems caused by age. Rate was considered inadequate to handle the exposures. Youthful driver rate classes were unprofitable for many years. Elderly drivers were eventually surcharged to compensate for the added exposure, but these surcharges were later removed under pressure.

Underwriting rules were common, as they referred to the age of the drivers. Those under age 25, (sometimes under 30), were not written alone. If the insurer handled the family's business, a youth's car may be written, but not otherwise. This was particularly true for unmarried youths. The rule often excluded drivers over age 65, 68 or 70, unless the risk had been insured with the company for a period of time prior to arriving at that age.

Commercial vehicle insurance was subject to the same factors and often used the same rules. Inexperienced, immature, youthful drivers could be a real hazard when driving the many miles required of most commercial operators and the large trucks often used. A truck fleet that hired such youthful operators was underwritten with extreme care. Some underwriters preferred to exclude all drivers under age 25. Elderly drivers were usually removed by mandatory retirement plans, but where they did continue to drive, cautious underwriting was used.

Even dwelling fire insurance was affected by the age of the insured. Elderly residents often were unable to maintain the premises properly because of lack of income and loss of mechanical ability. The property often tended to be older. Also, there was little possibility of desirable related business, such as automobile or life insurance. While age rules were seldom published as such, underwriters used caution in writing residential fire or homeowners' insurance on elderly people.

Youthful occupants of a home or apartment were more likely to have low values in personal property and less stability than middle-aged persons. Minimum value rules sometimes excluded this class. Age rules alone were seldom used, but other factors were significant. The most important of these other factors were sex and marital status.

## **Gender**

Underwriters have long recognized that there are differences between the sexes from an insurance standpoint.

Automobile accident involvement differs considerably by the sex of the driver. Males have a higher percentage of accident involvement at every age bracket. Males have 1.7 times as many accidents as females.

Another report showed a different automobile insurance problem. The Traffic Injury Research Council of Canada related a study of the driving habits of Canadians and gave the findings in its annual conference report. It revealed that "during a random sampling of motorists over a period of months, the percentage of males discovered drinking while driving was twice that of females."

Based on such studies, plus experience, underwriters used to refuse to write youthful male drivers as a class, particularly when they were not married. Obviously, this is not the case anymore.

## **Marital Status**

Underwriters preferred married persons living with their spouses and with one or more children. It was generally accepted that this group had stability and predictability, avoiding the increased hazards and uncertainties of other types of living arrangements.

Other relationship statuses introduced different and new risks that underwriters had to consider. Did divorce pose a moral risk? How about people who rush into serious relationships that involve moving in together, but fall apart quickly? How does a person's success or failure at love really affect his or her risk level? Well, underwriters have learned a few things over the years, and while certain aspects may suggest discrimination, examining a person's stability in relationships that



involve cohabitation is something underwriters must do.

### **Mingles**

The term "mingles" refers to people of opposite sexes who live together as though they were married, but who actually are single.

This type of living arrangement is not new. It probably has existed during most of history. It has been called by different terms, such as "cohabitation." In many states, the continuation of this arrangement can lead to common law marriage, which can have the same impact on insurance underwriting as the more traditional type of marriage.

The problem with mingles from an insurance standpoint is the instability and lack of certainty about the future. An automobile underwriter likes to know who will be driving the car and with the temporary arrangement of mingles, this cannot be known. A homeowners' underwriter wants to know who owns and who will be using the property, and again "mingling" makes this uncertain.

The difficulty is that one who mingles may change living partners with ease. If an automobile policyholder is a young woman, her present mingling partner may be acceptable as an occasional driver, but what if he leaves and another man takes his place?

The underwriter would not know of his driving record, if indeed any notice was given of his presence in the "home." Or, worse, the other partner might have a poor driving record, but has his own car, so it is alleged that he will never drive her car. Underwriters would not accept that allegation, believing that if her car was blocking his in the driveway, or his car was in the garage for repairs, he would use her car to run down to the market.

In many states, permissive users cannot be excluded and, in others, they can be excluded only by name. Therefore, it is not a viable alternative in many cases to cover one partner and not the other. The problem remains even if the present partner is acceptable and provision is made for notification of any change of partners, since the cancellation laws could restrict an underwriting action on an existing policy if a new partner was unacceptable.

Homeowners' policies generally cover personal property "owned or used by the insured." Suppose that a policy is issued to a young woman living alone. Then a young man moves in with her under a mingling arrangement. Serious questions arise as to the extent to which her policy insures his property. If he supplies a television set and other furniture, could it be said that she does not "use" them? At best, the risk is almost certainly not insured to value. At worst, his property or his living habits might not be acceptable, but his presence may not be revealed to the underwriter. Even if it were revealed, it would be costly to investigate him, and again the law might prohibit underwriting action.

For these reasons, underwriters did not want to write insurance for people who were in this type of living arrangement. The guides to unacceptable risks often included such items as "unmarried persons living together."

Such guides did not say that unmarried persons living together were prohibited. There were situations which were acceptable. If the arrangement was quite stable, the underwriter could conclude that the inherent instability of this lifestyle was not present in this case.

At some point in time, a common law marriage was assumed by the laws of many states, or the underwriter could assume that a similar result had been attained. When the arrangement between two people had continued for five or more years, or some such period, many underwriters would accept the risk, if other factors were satisfactory.

### **Single, Separated, Widowed and Divorced**

Builders of homes have adopted the abbreviation "SSWDs" to refer to the "single, separated, widowed and divorced" people who are buying homes in increased numbers. Members of this group have caused concern to underwriters for many years, both in homeowners' insurance and automobile insurance.

The basic problem with SSWDs is instability. In many cases, the present is filled with turmoil and the future is uncertain.

Singles of any age are generally less stable than married persons. This is reflected in their driving of automobiles. Single drivers for both sexes have more than one and one-half times as many accidents as married drivers. This problem also carries into property insurance, because these persons tend to travel more and may live with different persons of the same or the opposite sex.

Separated persons offer a special problem with instability. Being neither married-living-with-spouse nor divorced, their future is unknown. Emotional problems often exist which can adversely affect the driving. If the insured on a homeowners' policy is separated, there may be inadequate arrangements for the maintenance of the property.

Widows and widowers are the best of this group. There is more likely to be an emotional adjustment after a period of time which can be traumatic. Both associates and future living conditions may be uncertain. Many of the people in this category have adjusted well, but some have not, and underwriters needed to determine the group to which an individual applicant belonged.

Divorced persons present insurance problems, particularly during the early stages of the divorce. Emotional turmoil is common, often having an adverse effect on driving patterns. Problems arise concerning the division of property, as well as its care and future location. Some divorced persons go through a period of extreme social activity, which can affect all aspects of their lives.

All unmarried persons presented potential difficulties to underwriters. Not every individual was a problem, but it was not easy to separate them. The type of investigation which could reveal the facts was not always available or practical. Therefore, underwriters often listed unmarried applicants on caution lists, to be written only if the potential instability and emotional problems were not present.

## **Occupation**

The occupation of an applicant has long been considered to be a good indication of the chance for future losses. Occupation was believed to demonstrate the type of exposures that could be expected, as well as the inherent hazards of some occupations.

## **Travel**

Certain occupations seem to offer increased chances that a loss will occur because of excessive travel. Some automobiles are driven far more than average because of the requirements of the job. Sales people who use their cars in their work are a prime example. They may drive considerable distances every day. In addition, their minds may be more on the sales approach they will use with the next prospect than with the road conditions around them. The increased mileage and possible inattention were believed to present greater potential for loss than the average driver.

These same travelers also caused concern to the underwriters of homeowners' and theft policies. In this case, all occupations that involved a considerable amount of travel were suspect, even though the travel was by air. Persons who travel overnight must take clothes, toiletries and incidentals, and these are usually packed in luggage which is fairly compact. The ease of transporting the luggage makes it easy for thefts. Many occupations involving travel will require an above-average wardrobe, whether to impress a sales prospect, to give a neat appearance

before fellow employees in other branches, or to look impressive when speaking before a group or meeting.

The luggage may also contain samples, valuable articles, cameras and other targets for thieves. There have been actual cases where a diamond merchant was robbed of the display stock that he or she was taking to a sales exhibit, with the loss in the hundreds of thousands of dollars.

Coupled with this propensity for transporting expensive articles in compact containers is the fact that the property often is left unattended in exposed places. Airline terminals and hotel lobbies are places where luggage often is left for periods that are long enough for a theft to occur. Luggage is left in motel and hotel rooms, and many employees of a transient nature have keys that can provide easy access into rooms. A person who travels by car may leave both personal and business property in the car, unattended, while in a restaurant, a gas station or while checking into a hotel or motel. A traveling salesperson, conscious of his or her appearance, may have a number of expensive suits or other clothing inside the car—a tempting target for a thief.

For all of these reasons, underwriters used rules that attempted to exclude from acceptance those people who traveled extensively. Automobile underwriters used a rule like “persons who travel more than 25,000 miles in a year.”

Homeowners’ underwriters used such rules as “applicants who travel extensively in their work” or “applicants who are away from home on business more than 15 weeks a year.” Commercial crime underwriters specified protective measures for high-valued property that might be carried in the course of business, and refused those who did not comply. The measure of actual increase in exposure in all cases was difficult, so underwriters tended to refuse those applicants whose travel exposure appeared to be above average, using cut-off points which had been determined by experience with past losses.

### **Transients**

Some occupations are of the transient type. Requiring little training in most cases and offering few benefits by longevity, these jobs attract the “floater.” Many of these people prefer to move around frequently. They do not want to be tied down to one job or to one location for a long time.

Some of these occupations are relatively unskilled, and neither require nor encourage remaining on one job for an extended period. Examples are restaurant and cocktail bar employees (dishwashers, waiters, cooks, etc.), car washers, bowling alley employees, hotel employees (maids, bellhops, desk clerks, etc.), pool hall employees, service station attendants, janitors and domestic employees.

Other occupations of the transient type may require more skill, but the nature of the work seems to encourage drifting. Examples of these are barbers, beauticians, merchant seamen, oil field and mine workers, house painters, dock workers, bartenders, commercial fishermen and taxi drivers.

Still other occupations require movement in order to follow the seasonal patterns inherent in these jobs. Some examples are circus and carnival employees, construction workers, farm laborers and race track employees.

Certain other occupations that require a transient type of living can pay large salaries, which increases exposure to drugs, alcohol and theft. This category includes professional musicians, actors and actresses, dancers, other entertainers and professional athletes. Among other hazards is the increased exposure to suit because of the prominence and income of many of these people.

All of these groups were underwritten with great care. The lack of stability was believed to increase the chance of loss on automobile and homeowners’ lines. Being transients, policyholders might be difficult to locate if testimony was needed for a court defense or if a signature on an

endorsement was required. Premium collection might be more difficult. Occupations of these types were listed by underwriters on caution or unacceptable lists.

### **Other Types**

Certain other occupations presented unique situations that concerned underwriters. Some of these might be unexpected, while others are logical even to a person not trained in underwriting. These occupations appeared on many underwriting lists and were handled with care by personal lines underwriters.

Military risks often combine many of the undesirable features of automobile insurance: youthful drivers, unidentified permissive users and frequent transfer to new locations. For years, many underwriters refused to write military risks because of these problems. Later, some exceptions were made in the rules for older members of the armed forces (over 30 years of age, for instance), for those in the higher pay grades and for commissioned officers.

Sometimes exceptions were made for those who lived with spouses off base. These exceptions were made with care because of the inherent problems associated with this group.

Students were excluded for many of the same reasons as military risks. Inexperience, lack of control over driving and a tendency toward long weekend trips were areas of concern to underwriters. Again, students who were married and living with spouses were often accepted. Otherwise, the group was rejected, unless the company also insured the family of the student.

Illegal activities were the mark of a number of occupations, all of which were excluded as completely as possible by underwriters. Drug smuggling, importation of illegal aliens and similar activities were those intended to be kept out by the general classification of "those engaged in illegal activities." Aside from the ethical questions involved in furnishing insurance to such persons, there were the increased hazards of night driving, possible shootings and unfavorable impressions as witnesses. Any occupations that appeared to fall within these categories were excluded from acceptance.

### **Stability**

A thread running through many of the foregoing factors is the stability of the applicant. However, stability itself can be a requirement for all lines of insurance.

In personal lines, underwriters requested information on a number of areas in order to determine the degree of stability. How long has the applicant been on the present job? How many jobs has he or she held in the past few years (specified number of years)? How long at the present living location? How many addresses in the past five (or so) years? Rules often were established to determine acceptability based on these items.

The types of residence and address also were considered. An automobile applicant who lived in a hotel or motel was not accepted by many underwriters, because such living quarters ordinarily indicated a transient, unstable type of person. Likewise, if the mailing address was a post office box, the application was declined. Underwriters were concerned with possible difficulties in locating the insured in case of suit and the ability to collect premium.

Tenants, as a class, were known to change their living addresses more often than owners of homes. Every move changes the exposure to loss—on an automobile because of neighborhood crime patterns and unfamiliar traffic, and on property because of physical characteristics of the property and environmental hazards. Many times, a tenant will move and not notify the insurer, thereby causing coverage questions. The loss ratio on tenant homeowners' policies was almost always higher than on other forms, which appeared to substantiate the fears of underwriters. For these reasons, tenants were less preferred than homeowners, and underwriting rules often reflected this feeling.

Many of the questions asked by underwriters on applications were designed to show the stability of the applicant. Combinations indicating instability were cause for rejection, along with specific rules concerning the number of jobs, the number of moves and how long one resided at the present address.

In commercial lines, stability was indicated by the length of time the applicant had been in business. Small retail stores and service establishments were particularly subject to bankruptcy after only a short time in business. Various studies have shown that only a small percentage of business ventures survive the first few years. One writer on the subject put it this way:

"About 600,000 new businesses open their doors in the United States each year. Almost an equal number quit and go out of business. Only about one in five new businesses lasts as long as 10 years—some go bankrupt and others close up shop after paying off their creditors."

For a new business, a reputation is not yet established, inexperience is common and under-capitalization is not unusual. If a business fails, the insurer may have difficulty in collecting premiums due. The moral hazard is increased if the owner sees the business starting to fail. Maintenance of equipment also suffers because of the lack of funds. Commercial underwriters often used rules to attempt to screen those risks that have not demonstrated their stability. A common requirement was that the applicant must have been engaged in the business for at least one year.

## **Social Maladjustment**

People who have difficulty coping with today's economic system exhibit a type of instability. Those who are on welfare or who have trouble with credit collection agencies are underwritten cautiously.

## **Attitude**

The attitude of the applicant is a major part of the concern of underwriters in personal lines. Maturity and responsibility are critical in driving a car and in maintaining property. Attitudes toward the rights of others and one's relationships with others demonstrate the type of person who is applying for insurance.

The importance of attitude is expressed in the following comments from an article on underwriting:

"As part of the 'Fatal Driver Profile' compiled by the U.S. Department of Transportation, investigators conducted a separate psychological evaluation of more than 200 fatally injured drivers who were found most responsible for fatal accidents in the Baltimore area over the past five years. To determine the attitudinal characteristics of these drivers, family, friends and colleagues were interviewed. It was found that these drivers were significantly different from the norm, displaying more belligerence, negativism, verbal expansiveness and general psychopathology, regardless of their age or alcohol involvement. Analysis of the Baltimore data indicated a slight correlation with alcohol usage, but not with age, prompting investigators to conclude that psychological factors might be more important than either age or alcohol use in causing fatal accidents."

Faced with this type of information, underwriters attempted to determine the psychological make-up of applicants. A risk was declined if the "attitudinal characteristics" were not normal.

## **Criminal Record**

A large number of all crimes are committed by people with a prior record of criminal activity, according to many reports.

A person who had been convicted of a crime was considered by underwriters to be more likely to commit another crime than a person who had no police record. Furthermore, the associates of a person with a criminal record were believed to be less trustworthy than average. Automobile underwriters were concerned with driving attitudes, particularly as they involved the rights of others. The possible use of the automobile in a crime or its use by unsavory associates also was considered. Court appearance in case of suit was still another factor.

Homeowners' underwriters were aware of the impact on maintenance of property if the insured had no sense of personal responsibility. Parties attended by other criminal elements might cause damage to the premises. Both moral and morale problems were felt to exist. Commercial underwriters had special problems, because employees of many firms handle money, drive expensive equipment or work on loading docks with valuable products. The opportunities for committing a crime are plentiful in most commercial establishments. Underwriters were uneasy if employees in such situations had criminal records. An extreme situation was presented to bond underwriters, where the honesty of the employee was the subject of the protection.

Every line of insurance was adversely affected if the insured, an associate or an employee was more interested in causing a loss than preventing it. A past record of crime convictions was felt to be a fairly reliable indicator that such a person might cause a future crime. For these reasons, most underwriters listed persons with a criminal record as unacceptable.

### **Mental Incompetence**

A lack of mental competency can create all kinds of problems for insurers. Such a person can cause direct damage to persons or property. Inattention and lack of proper care of property can lead to serious consequences. Defense in a court suit is greatly hampered by evidence of mental incompetence. The very uncertainty caused by this condition may be the greatest difficulty because the entire structure of insurance is built upon the ability to predict the future from past events.

There are many degrees of mental incompetence, of course. Some such people can operate very well in society, with few associates ever learning of the impairment. Others are generally harmless but can change quickly. Some of these people are docile, while others tend to be violent. When the condition gets too severe, forcible detention in an institution is needed, although under modern treatment it is often preferable to release the patient to family members if possible. Some people have been hospitalized for treatment of mental or nervous conditions. Whether this means that the person is "mentally impaired" is a matter of judgment. There are so many factors to consider that definition is difficult.

An underwriter cannot be expected to distinguish the problem cases from the harmless. The increased chance of loss from those who might be violent or irresponsible is so great that underwriters felt that they did not dare to take a chance, trying to accept those who appeared to be "safe." Accordingly, it was common practice to exclude all persons who had given evidence of mental incompetence.

### **Physical Impairments**

Insurance underwriters were taught that selection, classification and rating were based on the Law of Large Numbers, which operated only with a large number of relatively homogeneous risks. Individual applicants who did not fit within that pattern were a matter of concern to underwriters.

Persons with physical impairments were one of the most obvious of the groups who did not fit the normal pattern. Usually the impairment is visually observed by others, but this is not true in all cases. Allowances for the handicap may be made in some aspects of society, but the impairment may not be tolerated in other areas.

All physical impairments have the potential for difficulties to insurers. Special adaptations often

are needed, which can increase the value of property in some cases and reduce it in others. Jury members who are sympathetic as individuals may be critical as jurors, tending to give the benefit of the doubt to the non-handicapped.

Many types and degrees of physical impairments exist, and underwriters try to separate them into groups to facilitate their handling.

### **Loss of Limb**

Probably the largest group includes those with such physical handicaps as the loss of a body member or the inability to use a member. There are few difficulties on lines other than automobiles, although adaptations of a home to accommodate the handicap may affect the value for others.

Automobile underwriters are greatly concerned with these physical, or motor, impairments. Modern traffic is difficult enough for a person with full physical capabilities, as is demonstrated by the millions of accidents each year. When an arm or a leg is missing or cannot be used, new problems exist. Great strides have been made in adapting automobiles to handicaps and in training impaired persons to use these adaptations. Special equipment can be secured, often at government expense, which will permit a reasonable degree of vehicle control, given proper training. The difficulty is that underwriters cannot determine, with the sources available, which of these persons are capable of operating with these adaptations and which are not. The existence of special equipment and training in its use does not guarantee that the person will then be a good driver.

The department of motor vehicles of one large state studied its program of taking action on the licenses of "P&M" (physically and mentally impaired) drivers and thus concluded:

"To a great extent, these programs are justified from a purely traffic safety perspective. Statistics show that the accident rate of P&M drivers is substantially inflated over the population rate, even when adjustments are made for extraneous factors, and that some of the increased risk is caused by the disability. Prior to their hearings, P&M drivers were found to have two to five times as many accidents as other drivers. For the lapse, physical and mental groups, the accident involvement rate was approximately two and a half times the population rate, and for the drug, alcohol and lack of skill groups, it was substantially higher...The proportion of P&M subjects' prior accidents that involved a single motor vehicle striking a fixed object was 2.4 times greater than those for drivers without known disabilities....Virtually all medical authorities agree that certain medical and physical conditions cause increased risk...There is also a considerable body of epidemiological evidence that some P&M conditions increase the probability of accident involvement."

In order to compensate for the uncertainty, automobile underwriters tended to reject all applicants who were physically handicapped with motor disabilities.

### **Seizures**

A completely different type of physical impairment is the "seizure." It includes diabetics, epileptics, spastics and persons with heart ailments. Again, the principal concern is with the operation of automobiles, although fire and other property losses could be caused by a seizure.

Automobile underwriters are concerned with an impairment which might interfere with the safe operation of the vehicle. A sudden seizure or blackout has been known to cause serious accidents. Injections and oral drugs can control many of these difficulties, but results are not guaranteed. Relapses or changed conditions may occur. The patient may fail to take the medication as prescribed for any one of many reasons. Even where control has been attained, this fact is hard to verify.

The usual sources of information are of little help in this area. Neighborhood informants may confirm that problems have existed, but they cannot give factual data on the degree of control attained. A doctor's statement often is the only good source available. Even this is of little help in many cases, because the statement may be couched in medical terms, obscure to an underwriter, or may be inconclusive as to the effect of the control on the patient's ability to drive. An underwriter can take little comfort from a statement which says that the impairment is capable of control with (named but unfamiliar) drugs, which may enable the subject to live a reasonably stable life. The underwriter needs to know if the ability to drive a car has been impaired.

Faced with these uncertainties, automobile underwriters usually listed as unacceptable all applicants who have been subject to any type of seizures or blackouts.

### **Hearing Impairments**

A person with impaired hearing may possess the skills that permit the operation of a vehicle and may be able to converse with other trained people by signing. These abilities may be offset by an inability to know about emergency vehicles or other traffic problems, and to hear barking dogs or other evidence of danger to property. The latter problems can cause some difficulty when underwriting a policy, but this seldom is considered to be a problem. The major concern is with the operation of an automobile.

Persons with hearing impairments usually can use hearing aids of one type or another. While these vary in their ability to compensate for the loss, they can give warning of adverse traffic conditions, such as emergency vehicles or honking horns. Other persons with severe hearing impairments cannot be helped in this way and are greatly limited in their ability to respond to sounds. It is the latter group which is usually called "deaf" by lay persons, generally implying a hearing impairment so great that they are unable to carry out normal functions such as conversation.

Since the operation of an automobile in modern traffic requires knowledge of surrounding conditions, severe hearing impairments caused concern to underwriters. The inability of persons with relatively impaired hearing to correct their hearing problems has caused automobile underwriters to automatically reject them. "Deaf persons" or "persons with severe hearing impairments" were on the lists of unacceptable risks for most companies, in one form or another.

### **Alcohol and Drugs**

People who use alcohol and drugs are less able than others to control their driving ability and maintain their property. This may not be true at all times, but the occasions when this occurs are unpredictable. For those who demonstrate a history of abusing such substances, a significant moral hazard is presented. This is one which cannot be ignored by underwriters – especially in terms of auto insurance when there are legal implications to consider as well.

#### **Alcohol**

People have used alcohol as a method of changing their attitudes toward circumstances since the dawn of time. Today, many people who drink are called "social drinkers." Seldom are they considered a problem by underwriters. However, such people may, on special occasions, drink too much. This can cause accidents while driving automobiles or commercial vehicles, can result in fires from carelessly discarded cigarettes, or can cause industrial accidents.

Underwriters who encounter these social drinkers who have had losses are understandably cautious. It is often difficult to draw the line between "social drinkers" and "problem drinkers." Therefore, a person who had incurred a loss while drinking was often rejected for insurance. At the very least, a substantial surcharge in rates was used to compensate for the increased hazard which could exist.

Many studies have confirmed the fears of underwriters concerning the impact of drinking upon the



ability to drive. The United States Department of Transportation conducted a series of Alcohol Safety Action Projects in four American cities, starting in 1983. As an example of the findings, the Boston study "indicated that 39 percent of fatal accidents examined involved alcohol directly, a combination of alcohol and other drugs, or other drugs alone."

The ongoing studies of the California Department of Motor Vehicles emphasize the role of drunk drivers. These strong conclusions were drawn from the latest studies.

"The drunk drivers are one of the major causes of serious accidents on the highways... drunk drivers are involved in 35.4 percent of the fatal accidents and 13.3 percent of the injury accidents. These figures apply to drivers who had been drinking any amount. These figures may be underestimates because not every instance of drinking is discovered by the investigating officer...the percentage of fatal accidents caused by drinking is estimated to be between 30 to 50 percent."

The problem of underage drinking was analyzed by the Western Insurance Information Service. The article contained the following conclusion:

"Drinking is another factor that impairs driving ability. Drivers under 18 have the worst collision involvement without alcohol. With alcohol, their collision involvement multiplies three-fold. On an even broader scope, drinking and driving is the biggest killer of people under 25. In addition, arrests for intoxication of those under the age of 19 have almost tripled in ten years."

After reading the results of such studies, it is not surprising to find that both personal lines and commercial lines underwriters are extremely careful when considering any applicant where alcohol is involved. It was difficult to separate occasional drinkers from problem drinkers, so most underwriting guides simply listed "excessive users of alcohol," or similar wording, to show unacceptable risks. The point at which drinking became "excessive" was typically a matter of judgment.

## **Drugs**

People have used drugs for centuries; however, they have only recently become a problem for underwriters.

Definitions are difficult. Alcohol may be called a drug, but ordinarily it is handled separately. Most drugs that are used are beneficial, such as in many types of medicine. It is true that some medicines may cause insurance problems. An example is the drowsiness encountered by some people after taking medication. Obviously, extreme drowsiness could reduce reaction time and increase the chance of a traffic or industrial accident.

The term "drugs," as it is used in the news media and the insurance industry, refers to such mind-changing drugs as marijuana, heroin, cocaine and the like. These are not taken for medicinal reasons. Rather, they are used to alter one's behavior.

Various studies have shown that a majority of high school students have smoked marijuana at least once. Obviously, a one-time trial "on a dare" or "just to see what it is like" will not concern an underwriter. Beyond that point, problems can arise.

The line between an occasional drug user and a heavy drug user or addict is difficult to determine. The habit is relatively recent when compared with alcohol. The extent of continued use, and the degree to which users attempt to lead normal lives, is still unknown. A heavy drug user or addict probably is totally uninterested in buying insurance, so the underwriter has no reason to be concerned. Others, however, may own homes, drive cars and work with vehicles or machinery. The degree to which the drugs affect the judgment and abilities of the user is of great concern to the underwriter in these latter cases.

Studies have not been conducted on the effects of drug use to the extent that they have on the effects of drinking. Some studies refer to "alcohol and other drugs," such as the Boston study referred to earlier. Even the official data often fail to separate drugs from other causes of accidents.

Underwriters feel that people who use artificial means to alter their behavior can be a problem. This is particularly true if the alteration results in loss of muscular control or hallucinations. Habitual drug users, therefore, are considered unacceptable to most underwriters, both personal and commercial. The wording in the rules referred to "habitual users of drugs," or "excessive use of drugs."

## **Foreign Born**

A particularly difficult group for underwriters to handle is composed of those who were born in foreign countries or raised in a non-English environment. Some of these people have no difficulty in handling the English language, so there are no selection problems. Others, however, cannot handle the language, and these people can be a cause for concern, particularly in automobile insurance.

People who cannot read English, or cannot read it well, will naturally find it difficult to operate in our high-powered, communication oriented society. Many highways and expressways operate at fast speeds with signs flashing by the driver. Off-ramp signs, road repair warnings and lane instructions appear quite suddenly in many cases. A driver who cannot read these signs, or who needs time to understand them, can be in serious trouble. Accidents could result.

Another problem with such people is their difficulty in understanding messages sent by the insurer. It is not uncommon for insurance companies to mail to the policyholders such items as premium notices, amendments to the contract at renewal and questionnaires that request information. Sometimes the latter must be answered, such as a selection of coverage options desired when an amendment is made to a No-Fault Law. Policyholders who cannot read these messages may cause repeated follow-ups, misclassifications or even termination of coverage.

In most lines of insurance, the policyholder may need to appear in court as a defendant. A person who cannot read or speak English well is placed at a disadvantage and usually will adversely influence the jurors.

Many of these foreign-born people do not become citizens of the United States. These factors were taken into account by most underwriters. When selection guides were published, they often contained such items as "persons unable to speak English well," "persons unable to speak or read English," or "non-citizens of the United States."

## **Related Business**

Some classes of business, as well as individual risks in any class, are borderline for acceptance. Underwriters often included, in their analysis, any other policies insured in the company.

One reason for requiring related business was the economy of investigation that could result. A small tenant homeowners' policy supplied too little premium to be able to afford much investigation, but the underwriter might have wanted to know more about the applicant. If an automobile or two were also insured for that applicant, much of the desired information usually was secured under that coverage. Stability, occupation, attitude, drug addiction and other factors are the same for all lines.

Similarly, a small boat policy could be underwritten better if the facts about the driving record, as well as the stability and responsibility, could be obtained from automobile policies.

Some lines of insurance were more profitable than others. An underwriter who was asked to accept a less profitable line might want to "sweeten the pot," by requiring one of the more profitable lines. Thus, applications for automobile insurance on a youthful driver often would be more acceptable if the parent's cars were also insured with the same company. The addition of a homeowners' policy on the family could make the risk even more palatable.

A degree of overlapping exists between some types of policies as regards the settlement of claims. For example, a burglary of a home might involve both a personal articles floater and the unscheduled portion of contents on a homeowners' policy. If these two coverages were written in different companies, each of them would need to conduct an investigation into the loss.

It would be more efficient to have both coverages in one company. Another example is a theft of an automobile, which might also involve scheduled or unscheduled property that was in the car. Still another example is an umbrella policy, where the claims handling on liability cases is tremendously complicated by having two or more companies involved in the loss. Thus, there are advantages from a claims standpoint to writing all coverages in one company.

Coverage advantages were achieved by account underwriting because gaps could be avoided if all policies were in the same company. Competitive advantages also were gained by keeping other producers from having close contact with the insured.

"Account underwriting" is a concept practiced by many underwriters. One test book describes it in this way:

"Account underwriting refers to the concept that the profitability of a particular insured's business should be determined on an overall basis. All other things being equal, business handled as an account may receive better treatment than a single policy. A request for additional coverage or unusual coverage might be met with little resistance if the files indicate that the insured has been loyal (and profitable) over a period of years. A request for a personal umbrella, for example, might be processed without hesitation for a known account; whereas an unknown applicant would be investigated quite thoroughly before the policy was issued."

For these reasons, underwriters not only desired the related business, but sometimes required it. The acceptability rule for a youthful driver as the principal operator of an automobile might have read "Acceptable only if all cars in the household are insured in the company." An unmarried applicant for a tenant homeowners' policy might have been accepted "only if the automobiles are insured in the company."

## **Prior Insurance**

The name of the previous insurer was usually requested by underwriters. With this information, a better picture of the risk could be obtained.

Past losses could be determined from the prior carrier. Automobile losses that were below the financial responsibility reporting requirements seldom appeared on the MVR. No central agency existed that furnished past losses on other lines. It was naive to expect the applicant to report, accurately and completely, the past losses on a voluntary basis. Investigation reports seldom developed this information. The only reliable source was the previous insurer. Obviously, the name of that insurer was needed before a request for the loss history could be requested. The importance of securing this type of information was stated this way:

"The actual record of a policyholder is much more reliable as an indicator of future performance than most other items. Underwriters depend heavily upon the principle of predicting the future by an analysis of the past. The problem, when an underwriter is considering a new applicant, is that he does not have the previous experience. It may not be available to him through any other source; even the application may contain errors or misrepresentations as to facts of previous

losses....The books of the previous insurer are sometimes made available to the underwriter, giving him access to this valuable information...the most important information that can be received from previous insurers is that concerning losses...These facts can probably be secured elsewhere but it is quicker and easier to obtain them from the previous insurer...This information can be helpful to an underwriter in determining the facts about the applicant."

Another item of interest to underwriters was the type of insurer with whom the previous insurance was carried. Many insurance companies specialize in one type of risk: preferred, standard or substandard. An underwriter looking at an application for preferred rates would be concerned if the prior insurer was a substandard company. Why was the applicant insured in such a company before? Had the risk improved so much that it was now properly assigned to a preferred category? The fact that prior insurance was with a substandard insurer did not make the risk unacceptable for preferred rates, but it did raise questions. The only way the potential difficulty could be identified was to get the name of the previous insurer.

What happened if the prior insurer was shown on the application as "none" or "unknown?" This indicated either that the applicant did not previously carry insurance or that the name of the prior insurer was being withheld for some reason. Absence of liability insurance appeared to indicate a lack of responsibility on the part of the applicant. Absence of property insurance raised the question as to why the person now has decided to secure insurance. Was there some thought of arson?

Of course, there could be a logical explanation, such as the purchase of a new car to replace an old one, or a person who had just learned to drive, or an effective sales effort on the part of the producer. Certainly, the situation raised questions in the mind of the underwriter and further information or explanation was needed. If there was a prior carrier indicated but the name was not given, the obvious reaction was to wonder what the applicant was hiding. Was it, in fact, a case of no insurance? Or did the applicant not want the underwriter to be able to verify the loss history? The underwriter would want satisfactory answers before accepting such an applicant.

A common underwriting requirement was the name of the previous insurer of the type of insurance being applied for and perhaps the policy number and expiration date. If this was not furnished, a rule was invoked that might read "unacceptable: applicants with no prior insurance during the past six months," or "one year or two years," etc.

### **Prior Cancellation**

Underwriters reviewing an application for insurance often would ask, "Where did it come from and why?" The first part of this question was discussed previously. The second part, the "Why?" was even more critical.

The producer may have sold the applicant on the advantages of changing the insurance to this underwriter's company. The applicant may have sought out the company because of advertising, word of mouth or other reasons. No underwriting problems were presented by these reasons for changing insurers. However, some applicants were looking for insurance because they had been rejected, canceled or non-renewed by a previous insurer. These are the cases that raise warning flags for underwriters.

All insurance companies want to write business. Without it, companies cannot grow or prosper. When an insurer therefore refuses to write a policy or to continue one, there has to be a reason. Some of the reasons may be perfectly harmless as far as the succeeding underwriter is concerned. Perhaps the previous insurer is retiring from a class of business or from a territory. Perhaps it is non-renewing all of the business of a particular producer. Few, if any, of these actions would be taken if the books were profitable, but many good risks could be terminated along with the less desirable ones.

The usual reason for cancellation or non-renewal is the discovery of factors that make the risk unacceptable. The driving record is the most common, but any of the other factors used by underwriters could be the reason. In these cases, the next underwriter may not want the risk either. This conclusion is not always correct, because different companies have different requirements and aim at different segments of the market. As a general rule, it is a cause for extreme caution on the part of the next underwriter.

The trouble is that it is difficult to find out the true reason for termination in many cases. Underwriters are reluctant to share subjective information, such as an uncooperative policyholder during the settlement of a loss. To avoid possible challenges, even allegations of libel or slander, underwriters often would not share such information, even over the telephone. The result was that the next underwriter really did not know why the policy was cancelled or non-renewed.

One study emphasized the problem this way:

"...a cancellation or refusal to renew issued by an insurer, for whatever reason, has constituted a virtual condemnation to the residual market. The reason for this lies in the fact that when, after such cancellation or nonrenewal, the individual applies to another insurer among the first questions on the application for insurance will be whether he has been rejected, cancelled or refused renewal by any other automobile insurer. When the answer is affirmative, the second insurer is unlikely to incur the trouble and expense of analyzing the reason and will simply reject the application."

The concern of the person who wrote the above comment was that these risks then land in the involuntary market. While this is to be regretted, it does confirm the standard practice used by underwriters for many years. Since it was difficult to find out why the other insurer rejected, cancelled or non-renewed the risk, and since the reason might also make the risk unacceptable in the next company, underwriters often rejected these risks automatically. A common rule in the non-acceptable list was something like "risks that have been rejected, cancelled or non-renewed within the past three years."

## **Underwriting Conclusion**

As you can see, a great deal of thought goes into the underwriting of risks. A skilled underwriter must rely on his or her experience as well as understanding of the current risks people face and how certain factors, such as the ones we've discussed over the last few sections, increase or decrease risk.