THE UNDERWRITING PROCESS OF MOTOR VEHICLE INSURANCE

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Abstract

The underwriting process is of prime importance to any insurer as it represents the starting point of the legal and financial relationship between an insurer and a particular proposer. This research focuses on the perceptions of the leading short-term insurers in South Africa concerning the underwriting process of motor vehicle insurance. The importance of the various underwriting factors is assessed in order to enable insurers to concentrate on a few most important ones. The specific problem areas of the underwriting process are thereafter highlighted, and possible solutions are discussed. In the last instance, the most frequently used stipulations to adjust insurance policies to take the underwriting factors into account and to alleviate underwriting problems receive due attention.

Keywords: Address of the proposer, Age of the proposer, Description of use, Distance to be covered, Driving history of the proposer, Insurable interest, Marital status of the proposer, Particulars of the motor vehicle, Proposer's history involving insurance in general, Sex of the proposer, Utmost good faith

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1. INTRODUCTION AND OBJECTIVE OF RESEARCH

Underwriting occurs when an insurer and an insured conclude a contract of insurance, whereby the insurer undertakes to indemnify the insured against losses due to specific future risks, while the insured has the obligation to pay periodic premiums to the insurer in return. The underwriting process concerning motor vehicle is, like other insurances, a lengthy and detailed process which should be well-planned. Various underwriting factors should be considered by the insurer before signing the motor vehicle insurance contract.

Asymmetric information exists as much of the information needed by the insurer is only available to the insured. Therefore, the basic principle of utmost good faith is applied in insurance, which actually states that all material information must be forwarded by the insured in order to enable the insurer to make an informed decision. Material information is the kind of information which will enable the insurer to decide whether to underwrite, and should he decide to underwrite, under which conditions and at what premium. During the underwriting process of motor vehicle insurance, the information concerning the underwriting factors should therefore be available to the insurer.

The *objective* of this research embodies the improvement of financial decision-making with reference to the underwriting process of motor vehicle

insurance. In order to achieve the research objective, a literature study represents the starting phase, after which an empirical survey is conducted. The empirical study focuses on the perceptions of the leading insurers of motor vehicles in South Africa concerning the underwriting factors, the problem areas experienced by the insurers and the possible policy adjustments to take the underwriting factors into account and to alleviate the problem areas.

2. UNDERWRITING FACTORS OF MOTOR VEHICLE INSURANCE

Various underwriting factors should be considered by an insurer before concluding a motor vehicle insurance contract (Tryfos, 1987:569). The underwriting factors relate to the particulars of the proposer, as well as the details concerning the motor vehicle. The main underwriting factors are briefly discussed in the following sections.

2.1 Age of the proposer

Drivers of motor vehicles are usually classified into different grouping, where younger drivers are commonly viewed as higher risks (Yeo et al., 2002:1198). When this underwriting factor is used to determine the acceptability of a proposer, it may represent a form of discrimination, as people do not have direct control over their age (Gardner & Marlett, 2007:49). The age of a proposer for motor vehicle

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insurance may however be perceived as a proxy for maturity, indicating differences in responsible behaviour (Wiegers, 1989:172). When used as a guideline rather than a central underwriting variable, the age of a proposer should be of big value to an insurer.

2.2 Sex of the proposer

To use sex as an underwriting factor may be regarded as discriminatory, because people cannot choose their sex. Men are sometimes viewed as a higher risk and therefore have to pay a higher premium to counter the higher risk. Wiegers says that the reasoning behind a possible higher accident frequency for men, is that men as a category may have a higher tendency to aggressive behaviour (1989:169). This rationale may be seen as unacceptable in the current society where everybody, irrespective of their sex, is perceived to be equal. To be reasonable, sex may only be employed as an underwriting factor when it can be proved that men cover more mileage than women, and are therefore expose to more risk.

2.3 Marital status of the proposer

The use of marital status as a rating variable in motor vehicle insurance may also lead to the conclusion that single persons are more irresponsible compared to married people (Wiegers, 1989:173). Marital status is sometimes regarded as a measure of maturity as married people are seen to be more settled down and responsible. These views discriminate against homosexual and single people, as marriage is a personal choice or belief. Insurers should be very careful to use marital status as an underwriting factor because that may be perceived by the civil society as being discriminatory.

2.4 Driving history of the proposer

The driving history of a proposer may help an insurer to determine the level of associated risk. The rationale of considering the previous driving history is that driving habits may be indicated by past traffic offences and convictions (Hoffer & Miller, 1979:444).

On the other hand, Butler and Butler have recognised in their study that there are no safe drivers, because accidents and traffic violations occur randomly due to the possibility that particular detrimental conditions may exist at that point in time (1989:201). It should also be considered that the information is not always reliable or complete, and that external forces which are out of the driver's control, may cause the accident. Conclusions about a proposer's driving history may be problematic and should therefore be carefully evaluated by an insurer whenever it is considered as an underwriting factor in motor vehicle insurance (Sloan & Githens, 1994:34).

2.5 Address of the proposer

The address of the proposer indicates the territory in which the motor vehicle will mainly be used. As each territory has its own characteristics relating to different traffic conditions and density, as well as different population concentrations, studies showed that territory is often a very valuable rating factor when underwriting motor vehicle insurance (Gardner & Marlett, 2007:54; Witt, 1979:33-60).

It should however be taken into consideration that problems may arise when two adjacent territories are classified as a high and a low risk area. People living directly outside the low risk area will be charged higher rates due to the higher risk, even though they may be of a low risk nature. The classification of high and low risk areas should therefore have an intermediate area with a moderate risk to accommodate low risk proposers living in higher risk areas, and vice versa.

2.6 Proposer's history involving insurance in general

A proposer's attitude towards risk and insurance in general is an important underwriting factor in motor vehicle insurance. An insurer is however at an informational disadvantage as proposers may tend to underreport their history involving insurance in general. Although the basic principle of utmost good faith stipulates that all material information must be forwarded by the insured to enable the insurer to make an informed decision, policyholders switching to another insurer may not be the best proposers and perhaps not disclosing all relevant facts about their insurance history.

While a proposer's history relating to insurance in general should be included as one of the underwriting factors of motor vehicle insurance, it should not be given too much weight, as information is not always reliable and complete. Insurers should rather focus on specific aspects, like previous refusals of cover to the owner of the motor vehicle or previously detected fraudulent claims, in order to assess a proposer's attitude to insurance in general (Viaene et al., 2007:565-569).

2.7 Ownership of or financial interest in the motor vehicle

An prerequisite for all first party proposers of motor vehicle insurance is that they should have an insurable interest in the subject matter. An insurable interest exists when a legal or financial relationship is found between the proposer and the subject matter of the insurance, and when the proposer will experience a financial loss if the subject matter is damaged (Dinsdale & McMurdie, 1987:245; Hansell, 1987:135). No claim will be paid by an insurer if an insurable interest is not present. When underwriting

motor vehicle insurance, one of the factors to be considered has to be whether an insurable interest exists between the proposer and the subject matter, otherwise the contract of insurance will be null and void.

2.8 Description of use and distance to be covered by the motor vehicle

Every motor vehicle will have a description of use in the particular insurance policy. Usually there are a few categories, like use for personal, business or farming purposes. The description of use is an indication of the level of risk associated with the employment of the motor vehicle and is also an indication of the mileage to be covered within a year. According to Litman, studies have shown that annual crash rates tend to increase when a motor vehicle's annual mileage increases (2005:38).

To employ the distance to be covered by the motor vehicle in a year as an underwriting factor, is not very feasible as it is mostly based on an estimate by the proposer of the insurance. It is only human to underestimate the mileage, as the proposer stands to benefit from under forecasting the mileage by paying a lower premium.

2.9 Particulars of the motor vehicle

The particulars of the motor vehicle represent the characteristics thereof which make the vehicle different from other motor vehicles. This section therefore focuses on the type of the motor vehicle and the associated value, the age of the vehicle and the safety features added to protect the passengers and the motor vehicle. The type and the associated value of the motor vehicle are two underwriting factors which can be easily determined. The rationale behind lower premiums for older motor vehicles is that the repair cost of a new motor vehicle is usually higher than that of an older one. Advances in motor vehicles have seen a great improvement in technology which leads to increased repair cost, for example the use of aluminium as a building material in newer cars (Horn, 2008:44-48). Safety features to protect the passengers mainly relate to the airbag systems as well as antilocking braking systems (Perissinotti, 2008:54 & 57). Airbag systems may offer bodily protection and reduce fatalities during motor vehicle accidents (Kneuper & Yandle, 1994:107). On the other hand, Weiss has shown that air bags may have negative effects when employed on young children and small adults (1998:206). There are various safety features to protect the motor vehicle against theft and break-ins, for example the fitting of gear locks, alarm systems, anti-hijacking systems and tracking devices. While underwriting a motor vehicle, an insurer should take these safety features into consideration when deciding whether to underwrite, and should he decide to underwrite, under which conditions and at what premium.

3. RESEARCH METHODOLOGY

This study aims to identify the key variables used in the process of underwriting motor vehicle insurance. The aim will not only be to identify the underwriting factors, but also to embark on an empirical study to discover the importance and weighting of these variables to various insurance companies. These underwriting factors differ between companies based on their approach, cost objectives or target market. There should, however, exist a degree of consistency between these companies with regard to the variables used and their importance. This study aims at pinpointing the underwriting factors and the problems encountered with them. The ultimate objective will be to suggest solutions to the particular problems to improve financial decision-making by insurers.

The empirical research of this study involved short-term insurance companies operating in the South African market. According to a confidential report by Santam Limited (2007:6, 11 & 21) it is clear that 82.6% of the total gross premiums written for motor vehicle insurance were underwritten by nine short-term insurers (in the general segment) in 2006. These nine short-term insurers represent the universe of this empirical study and they were asked to complete the questionnaire regarding this research topic. It seems appropriate to only select the top nine insurers as the remaining 17.4% market share were covered by a large number of smaller insurers. These nine selected are considered to be the market leaders and should also possess greater experience in the insurance business, as well as the underwriting process itself. A questionnaire was drafted and sent to insurers by mail together with an invitation letter in 2008 to learn about various aspects of the underwriting process of motor vehicle insurance. The questionnaires were sent to the underwriting managers of the respective companies, as they are viewed as being most knowledgeable of the relating aspects of underwriting. After following up, eight completed questionnaires were available. The results obtained therefore do not represent 82.6% of the gross premiums written as stated before, but 74.45% (Santam Limited, 2007:6, 11 & 21).

4. EMPIRICAL RESULTS

The empirical results focus on the importance of the various underwriting factors, the problem areas of the underwriting process, and policy adjustments to take the underwriting factors into account and to alleviate the problem areas.

4.1 Underwriting factors

The importance of the underwriting factors as mentioned by the respondents appears in the following table. A Likert interval scale was used, ranking from extremely important to not important.

Table 1. Importance of the underwriting factors according to the respondents

Underwriting factors	Extremely important	Highly important	Moderately important	Little important	Not important
Name and address of the owner of the motor vehicle	6	2			
Age of the owner of the motor vehicle, or any person who (to the owner's knowledge) will drive the motor vehicle	8				
The <i>number of years</i> that the <i>owner</i> of the motor vehicle, or <i>any person</i> who (to the owner's know-ledge) will drive the motor vehicle, are duly and fully <i>licensed</i>	5	1	1		1
Particulars of previous <i>motor accidents</i> (not claims) involving the <i>owner</i> of the motor vehicle, or <i>any person</i> who (to the owner's know-ledge) will drive the motor vehicle	7	1			
Particulars of previous <i>convictions</i> of the <i>owner</i> of the motor vehicle, or <i>any person</i> who (to the owner's knowledge) will drive the motor vehicle	4	2	1	1	
Particulars of previous <i>refusals</i> of cover to the <i>owner</i> of the motor vehicle, or <i>any</i> <i>person</i> who (to the owner's know-ledge) will drive the motor vehicle	5	2	1		
Particulars of the motor vehicle	6	1	1		
Particulars of the <i>owner-ship</i> of <u>or</u> <i>financial interest</i> in the <i>motor vehicle</i>	3	2	2	1	
Particulars of the <i>storage</i> of the <i>motor vehicle</i> over night	4	2	2		
Particulars of whether the <i>motor vehicle</i> is fitted with an <i>alarm system</i> and/or a <i>gear lock</i>	2	2	2	1	1
Description of <i>use</i> of the <i>motor vehicle</i> for the professions and/or busi-ness of the various drivers	6	1			1
Distance to be covered by the motor vehicle during the next 12 months	1	2	1	1	3

<u>Note</u>: Seven other underwriting factors were mentioned by only one insurance company each and were excluded from the above table.

The results as it appears in Table 1 have to be weighed to clearly determine which underwriting factors the insurers have placed the most emphasis on. Although a Likert interval scale has been used, it has become important to assign points to appropriate responses (votes) as it then becomes possible to determine the ranking of each underwriting factor. It must be emphasised that it was stated on the questionnaire that the Likert interval scale forms a continuum, which makes the calculation of weights possible (Albright, Winston & Zappe, 2002:224-229

& 245).

A score has been assigned to all relevant responses (votes) and the totals calculated. A score of five has been assigned to an "extremely important" response, four to a "highly important" response, three to a "moderately important" response, two to a "little important" response, and finally a score of one to a "not important" response. The factor analysis of the importance of the underwriting factors in a declining order of importance is shown in Table 2.

Table 2. Factor analysis of the importance of the underwriting factors, in a declining order

Total score calculated	Declining order of importance	Underwriting factors
40	1	Age of the owner of the motor vehicle, or any person who (to the owner's knowledge) will drive the motor vehicle
39	2	Particulars of previous motor accidents (not claims) involving the owner of the motor vehicle, or any person who (to the owner's knowledge) will drive the motor vehicle
38	3	Name and address of the owner of the motor vehicle
37	4	Particulars of the motor vehicle
36	5	Particulars of previous refusals of cover to the owner of the motor vehicle, or any person who (to the owner's knowledge) will drive the motor vehicle
35	6	Description of use of the motor vehicle for the professions and/or business of the various drivers

34	7	Particulars of the storage of the motor vehicle over night
33	8	The number of years that the owner of the motor vehicle, or any person who (to the owner's
		knowledge) will drive the motor vehicle, are duly and fully licensed
33	8	Particulars of previous convictions of the owner of the motor vehicle, or any person who (to the
		owner's knowledge) will drive the motor vehicle
31	10	Particulars of the ownership of or financial interest in the motor vehicle
27	11	Particulars of whether the motor vehicle is fitted with an alarm system and/or gear lock
21	12	Distance to be covered by the motor vehicle during the next 12 months

The age of the owner of the motor vehicle or any person who (to the owner's knowledge) will drive the motor vehicle, has unanimously been mentioned as the factor which is extremely important in the underwriting process. It is the only underwriting factor which was rated as extremely important by all the responding insurers. Previously in this study there was mention of concern over the use of age as a rating variable in the underwriting process of motor vehicle insurance. The reasoning over such concern being that age is a factor that changes over time and is out of control of an individual. The results show that underwriters in South Africa do not view age as discriminatory in any way as all responding insurers have rated it as extremely important. Thus age as an underwriting variable does play an important role as it is an indication of the maturity of the proposer. It will help insurers to correctly decide whether or not to underwrite, and should they decide to underwrite, under which stipulations and at what premium.

Insurers have placed the second most emphasis on the previous motor accidents of the owner of the motor vehicle or any person who (to the owner's knowledge) will operate the motor vehicle. This serves with a great deal of importance as insurers can use this to more effectively draw up the risk profile of a proposer. It does this because insurers are given information that deals directly with the loss experience of the proposer. Information like this is valuable, but not fully representative as there are a large number of smaller collisions or losses that are in many cases not reported. There are a number of problems with using this underwriting factor as a rating variable, such as lack of complete information available to insurers, but as it is very difficult to forecast the occurrence of a collision, the use of previous collisions serves with great importance.

The name and address of the owner and the particulars of the motor vehicle are the underwriting factors which are next in the declining order of importance. Although the name is critical to the inception of any contract as the parties to the contract have to be correctly specified, it does serve a purpose in underwriting as it may be in the data base of a particular group of insurers indicating previous experiences and blacklisting. The address of the proposer does play a big role; it helps insurers to assign the proposer into a territory rating. Using a territory rating an underwriter can identify the losses associated with a particular geographical area. Doing so enables them to build a proper risk profile of the proposer and assign a correct premium to losses forecasted.

The particulars of the motor vehicle without a doubt have a central role to the contract as it provides an indication of the extent of indemnity concerning the motor vehicle of the proposer. This is due to the fact that an indemnity in motor vehicle insurance is based on the retail value of the motor vehicle at the time of the loss. It also helps to identify the losses associated with a particular make and model of motor vehicle.

Particulars of previous refusals of cover to the owner of the motor vehicle or any person who (to the owner's knowledge) will drive the motor vehicle, has been mentioned as the fifth most important underwriting factor. This is not surprising as refusals of cover provide information on the proposer that could be of a possible negative influence. Proposers would prefer not to have insurers know about such instances of refusal. It provides insurers with an unbiased source of information, and also alerts the insurer about a proposer's attitude and behaviour when involved with insurance. It is difficult to obtain such information as proposers may not always be willing to furnish such information, while insurers are not always willing to share information with other insurers. Insurers should place great attention on this factor while underwriting as it could greatly affect their choice whether to accept a risk or not.

Description of use of the motor vehicle has also been shown to have a great influence as a rating factor in the underwriting process. Six of the eight insurers have stated that it is extremely important to the process of underwriting. This factor may be closely related to the estimated mileage to be covered, but according to the opinions of insurers, the description of use is a far more important underwriting factor than the distance to be covered by the motor vehicle during the next 12 months. The use of the motor vehicle allows an insurer to forecast risks associated with the motor vehicle as they are made aware of who will operate the motor vehicle and when it will be used.

Particulars of the storage of the motor vehicle over night take up the position of seventh most important factor in underwriting. It is not as important in underwriting as are the first few factors discussed, but does have a bearing on the premium calculation. It is important as when the motor vehicle is not in use, it may become vulnerable to theft or break ins. Thus storage of the motor vehicle at a particular place helps to understand the likelihood of such events occurring. Safety features such as alarm systems and/or gear locks perform a similar job to the storage of the motor vehicle. They allow the insurer to determine the vulnerability of the motor vehicle when not in use.

They also help to determine the level of safety the proposer practices, and so also determine whether it is a good or bad risk. The use of safety features, as alarm systems and gear locks, is of little importance in underwriting as indicated by the responding insurers. The use of these two underwriting factors may play a more significant role when used in conjunction with other variables such as territory and particulars of the motor vehicle.

The number of years the owner of the motor vehicle, or any person who (to the knowledge of the owner) will drive the motor vehicle, are duly and licensed, is an underwriting factor that usually may be related to the age of the driver. The insurers have placed no particular emphasis on this as a rating variable; this might be due to the fact that age serves as a proxy for this kind of information. An insurer can obtain or assume this kind of information directly from obtaining the age of the particular drivers. This shows that these two underwriting factors overlap each other and that inclusion of both is rather unnecessary. The age of the drivers may not only provide information on driving ability, but also on other aspects such as maturity and attitude of the proposer.

The remaining two underwriting variables to be discussed are the previous convictions of the owner of the motor vehicle and anyone who (to the owner's knowledge) will operate the motor vehicle (which has the same total score according to Table 2 as the previous underwriting factor), as well as the particulars of ownership of or financial interest in the motor vehicle. These variables have not been given much emphasis by the responding insurers, which show that they are of not much importance to underwriting. The previous convictions of the owner or other drivers do not provide the insurer with much information regarding the experience of the particular drivers with motor vehicles. It does however present the insurer with information on the character of the drivers, as well as the integrity of the drivers on a whole. Ownership of or financial interest in the motor vehicle does however have an effect on underwriting itself, as it is a condition obtaining an insurance policy. It should nevertheless have little effect on the calculation of the premium as it does not affect the risk profile of the proposer, nor does it alter the probability of a loss occurring. Ownership of or financial interest in the motor vehicle by the insured will be further discussed in the next section as it does present itself as a common problem faced by insurers.

4.2 Problem areas of the underwriting process

The respondents were asked to identify the problem areas of the underwriting process. The following four main problem areas were mentioned in a declining order of importance:

- (a) Breach of contract by proposers is the most important problem of the underwriting process. A lack of education on matters concerning motor vehicle insurance may be the cause of this problem. It is being suggested that the facts should be checked at the inception of the contract and that honesty should be emphasised. It appears that voice recording when concluding the contract may have a positive effect to obtain information from the proposers that is true.
- (b) Proposers not having an insurable interest are also a major problem of the underwriting process. Once again, the education of proposers on insurance matters should be applied and the existence of an insurable interest when concluding the contract should also be checked.
- (c) Persons other than the proposer driving the motor vehicle appear to be another problem of the underwriting process. The other drivers may have different risk profiles. Possible solutions may be to ask the proposer at the inception of the contract to state all possible drivers of the motor vehicle, or to charge a higher excess when handling a claim. Restricting cover to only people with a particular risk profile may have negative effects on an insurer's business.
- (d) The storage of the motor vehicle over night was also mentioned as a problem area in the underwriting process. Charging a higher excess when a claim is lodged may be a solution to solve this problem. Informing the proposer when concluding the contract that cover will not be available if the motor vehicle is not stored in a garage over night may also have the appropriate effect.

Other problem areas were also mentioned by die respondents. They are that the security of the motor vehicle is not as stated and the driver may be either under-insured or over-insured. An honest approach by both parties and the education of the proposers in insurance matters may be of help in this instance.

4.3 Policy adjustments to take the underwriting factors into account and to alleviate the problem areas

The underwriting problems experienced may be alleviated by the insurers by adjusting the stipulations of the insurance policy to take the underwriting factors into consideration. The leading insurers were asked to indicate how frequently they are using particular stipulations for this purpose, using once again a Likert interval scale which forms a continuum. The results appear in Table 3.

Table 3. Frequency of stipulations used to adjust insurance policies to take underwriting factors into account

Stipulations used	Always	Very often	Some-times	Seldom	Never
Adjust the level of the premium		6	1		
Require an excess (de-ductible) to be paid when a claim is made	5	1	1		
Require that the motor vehicle must be fitted with an alarm system and/or a gear lock	2	2	2	1	
Require that all drivers of the motor vehicle which is covered must be over a particular age	3	2	1	1	
Require that all drivers of the motor vehicle which is covered must be duly and fully li-censed for a particular number of years	2	1	1	2	1

Note: One of the eight insurers did not complete this question.

Results as it appears in Table 3 have to be weighed to clearly determine which stipulations are used most frequently by the leading insurers. A score has been assigned to all relevant responses (votes) and the totals calculated. A score of five has been

assigned to an "always" response, four to a "very often" response, three to a "sometimes" response, two to a "seldom" response, and finally a score of one to a "never" response.

Table 4. Factor analysis of the frequency of stipulations used to adjust insurance policies to take underwriting factors into account, in a declining order

Total score	Declining order of	Stipulations used
calculated	frequency	
32	1	Require an excess (deductible) to be paid when a claim is made
28	2	Require that all drivers of the motor vehicle which is covered must be over a particular age
27	3	Adjust the level of the premium
26	4	Require that the motor vehicle must be fitted with an alarm system and/or a gear lock
22	5	Require that all drivers of the motor vehicle which is covered must be duly and fully
		licensed for a particular number of years

The most frequently used stipulation in terms of policy adjustments as stated by the responding insurers was that they required policyholders to pay an excess in case of a claim. While five of the insurers stated that they always require their policyholders to pay an excess, the other insurers had different opinions as they require an excess respectively very often or sometimes. The differences in opinion across insurers could be attributed to not only difference in contract conditions, but also differences in client base (personal versus corporate insurances) and market preferences. An excess is useful for insurers, as it lessens the incentive for insureds to lay false claims as they will have to pay an amount of every loss. Furthermore, an excess helps an insurer as it will prevent policyholders from making many small claims, which can be costly to an insurer.

The second stipulation that insurers are using frequently, is the requirement that all drivers of the motor vehicle to be covered must be over a certain age. The results of this question varied as there was no consistency in the answers. Differences in insurers' attitudes could be the reason behind this finding. The insurers who showed less interest in this condition are the most interesting, as they may show a preference to rather charge a higher excess to those policyholders that fall under the minimum age

required. This would be simpler as it would save resources and time from adjusting the policy. It could prevent the owners of motor vehicles from allowing younger drivers to operate the vehicle as it would have a bearing on the excess amount at the time of claim settlement.

The leading insurers have placed the adjustment of the premium's level as the third most frequently used stipulation. Six of the responding insurers stated that they adjust their premiums very often to take the underwriting factors into account. This does make us aware that although premiums are thought to be reasonably fixed, insurers do adjust them to take new factors into account.

Insurers were then asked whether they would adjust the policy stipulations for requiring that a motor vehicle must be fitted with an alarm system and/or a gear lock. Only two responding insurers stated that they would always adjust the policy to take these stipulations into account, while two insurers opted to very often adjust the policy for such features. This gives evidence that some insurers do not always place a great amount of emphasis on installing alarm systems and/or gear locks. The choices of the insurers may also reflect the possibility that some insurers may have a wealthier client base where motor vehicles with superior safety features are offered as standard

items.

The adjustment the insurance policies in light of a requirement that all drivers of the motor vehicle must be duly and fully licensed for a certain number of years, was perceived as having the least frequency of the five stipulations. This relates directly to the second frequently used stipulation, as age is seen as a proxy for driver's competence. Using a minimum age or a minimum number of years a driver must be duly and fully licensed, may usually produce similar results.

5. CONCLUSIONS

The preceding research which is based on the perceptions of the major South African short-term insurers, leads to the following important conclusions:

- (1) The most important underwriting factors of motor vehicle insurance (in a declining order of importance) are as follows:
 - The age of the owner of the motor vehicle, or any person who (to the owner's knowledge) will drive the motor vehicle.
 - Particulars of previous motor accidents involving the owner of the motor vehicle, or any person who (to the owner's knowledge) will drive the motor vehicle.
 - The name and address of the owner of the motor vehicle.
 - Particulars of the motor vehicle.
 - Particulars of previous refusals of cover to the owner of the motor vehicle, or any person who (to the owner's knowledge) will drive the motor vehicle.
 - The description of use of the motor vehicle for the professions and/or business of the various drivers.
 - Particulars of the storage of the motor vehicle over night.
- (2) The main problem areas of the underwriting process relate to:
 - the breach of contract by the proposers of motor vehicle insurance,
 - the proposers not having an insurable interest in the motor vehicle,
 - persons other than the proposer who drive the motor vehicle, and
 - the storage of the motor vehicle over night.
- (3) An honest approach by the insurer and the proposer, as well as the education of the proposers in insurance matters may be useful to solve underwriting problems.
- (4) The most frequently used stipulations to adjust insurance policies in order to take the underwriting factors into account and to alleviate the problem areas are the following

(in a declining order of frequency):

- The stipulation that an excess must be paid by the insured when a claim is made.
- The requirement that all drivers of the motor vehicle which is covered must be over a particular age.
- The adjustment of the level of the premium.

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