

## REINSURANCE BY SOUTH AFRICAN SHORT-TERM INSURERS

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### Abstract

Short-term insurers utilize mutually loss sharing by obtaining cover for their risk portfolios by ceding a part thereof to a professional reinsurer, who pools the risks of various insurers. This study, which has the improvement of financial decision-making by short-term insurers pertaining reinsurance as its objective, focuses on the reasons why short-term insurers obtain reinsurance. The various methods/contracts of reinsurance, as well as the forms/bases of reinsurance which are employed by short-term insurers, represent main sections of this research. The factors which determine the retention level of a short-term insurer also receive the necessary attention. This study may serve as an illustration to other developing countries with emerging economies as the empirical study focuses on the market leaders of the General Segment of the South African short-term insurance industry.

**Keywords:** Forms / bases of reinsurance, Methods / contracts of reinsurance, Mutually loss sharing, Need for and uses of reinsurance, Non-proportional reinsurance, Proportional reinsurance, Retention level of short-term insurers

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### 1. INTRODUCTION AND OBJECTIVE OF RESEARCH

Mutually loss sharing constitutes the basis of short-term insurance, as the risks of *insureds* are pooled by short-term insurers, after which the insureds share the losses of that particular insurance pool. Short-term *insurers* are utilizing mutually loss sharing in the same manner by obtaining cover for their risk portfolios by ceding a part thereof to a professional reinsurer, who pools the risks of various insurers. The short-term insurers mutually share the losses of that specific reinsurance pool. The demand for short-term insurance should therefore impact on the demand for reinsurance (Blondeau, 2001:145). It is interesting to note that professional *reinsurers* use retrocession to cede their risk portfolios to one another (or other insurers) and uses mutually loss sharing in a similar manner. The focus of this paper is on the reinsurance which is obtained by short-term *insurers*.

The improvement of financial decision-making pertaining reinsurance obtained by short-term insurers depicts the *objective* of this research. To achieve this objective, a literature study was followed by an empirical survey. The need for and uses of

reinsurance by short-term insurers are discussed, whereafter the contracts/methods, as well as the bases/forms of reinsurance which are available, receive due attention. The factors which determine the retention level of short-term insurers also represent an important part of this topic. The empirical survey which focused on the General Segment of the South African short-term insurers, highlights the application of reinsurance by the market leaders.

### 2. NEED FOR AND USES OF REINSURANCE

Short-term insurers need optimal reinsurance arrangements to maximize the probability of their financial and operational survival (Balbás, Balbás & Heras, 2009:374; Bernard & Tian, 2009:709; Gajek & Zagrodny, 2004:421). Reinsurance satisfies various needs and is used for a range of purposes (Diacon & Carter, 1992:218-221). It is used to obtain protection against a *large individual loss* which may occur, like complete damage of a particular building. Due to the *law of large numbers*, the claims of small insurance portfolios tend to fluctuate more than large portfolios.

Reinsurance is therefore utilized to stabilize the claims of small insurance portfolios.

Many claims may arise from one detrimental event. Protection against the aggregation of claims caused by one event, like an earthquake, is therefore available by using reinsurance. Similarly the accumulation of numerous claims in a period, for example caused by various hail storms, may be covered by reinsurance.

Short-term insurers are not always keen to underwrite various large risks. By utilizing reinsurance and sharing the risks with professional reinsurers, short-term insurers may increase their underwriting flexibility and capacity. Due to epidemics and other natural events (like volcanoes and earthquakes), the basic probabilities may change. Reinsurance may also be used to cover those risks.

The solvency margin of a short-term insurer consists of the ratio between the ordinary shareholders' interest and the net written premiums. As the net written premiums equal the gross written premiums minus the reinsurance premiums paid to the reinsurers, a short-term insurer can improve its solvency margin by obtaining more reinsurance.

Professional reinsurers are usually experts on the technical aspects of particular classes of insurance. When a reinsurer covers some of the risks of a short-term insurer, the latter usually obtains access to the specialized knowledge and services of the reinsurer (Dorfman, 1998:365).

### 3. CONTRACTS / METHODS OF REINSURANCE

The contracts/methods of reinsurance are actually focusing on the various reinsurance contracts or agreements which may be concluded between a short-term insurer and a professional reinsurer, in order to achieve maximum coverage while a minimum of coverage gaps exist (Pollack, 1992:70). There are four possibilities which will be discussed (Carter, 1979:73-79; Diacon & Carter, 1992:222-224). The first type of contract is a treaty reinsurance contract which usually stipulates that the reinsurer will automatically accept all the risks which are ceded according to the stipulations of the contract (Harrington & Niehaus, 1999:88). The reinsurer operates blind while the basic principle of utmost good faith prevails between the two parties to the contract. This type of reinsurance contract is normally applicable for a particular period of time, whereafter it must be renewed. It should be clear that if the short-term insurer cedes poor risks to the reinsurer, the reinsurer may not renew the treaty contract when it expires. If this happens, the short-term insurer will have to pay much higher reinsurance premiums to other reinsurers in order to obtain adequate reinsurance cover in future.

The second type of reinsurance contract is called the facultative contract. This type of contract is often concluded when a particular risk is too large to be incorporated in a treaty contract. In the case of a

facultative reinsurance contract all material information must be provided by the short-term insurer to put the reinsurer in a position to exercise judgement. This type of reinsurance contract takes some time to conclude as the reinsurer may either fully or partial accept the risk, or may decide not to reinsure the risk. Facultative reinsurance usually allows a short-term insurer to provide not only broader but also higher levels of coverage (Donnell, 2007:14-15). It is interesting to note that short-term insurers also tend to employ facultative reinsurance when they need specialized knowledge to underwrite a particular risk and that the improvement in the quality of data was the start of modern facultative reinsurance (Ceniceros, 2007:34-35; McDonald, 2008:13-14).

The facultative-obligatory reinsurance contract which is usually applicable for a period, consists of three basic steps, viz.:

- A specific risk must meet the stipulated conditions of a facultative-obligatory contract, for example the proposer should be older than 30 years and must live in a rural vicinity.
- The short-term insurer is in the position to decide whether the specific risk will be ceded to the reinsurer or not.
- If the short-term insurer decides to cede the risk to the reinsurer, the reinsurer is bound to accept the risk.

It should be obvious that the reinsurer has the opportunity to stipulate the conditions to which the risks should adhere when the facultative obligatory contract is closed, but thereafter the reinsurer is obliged to accept all risks which adhere to the stipulated conditions and which are ceded by the short-term insurer.

The fourth type of reinsurance contract consists of reinsurance pools where a number of short-term insurers transfer a part of their risks concerning a specific class of insurance to a reinsurance pool. The risks are usually ceded back in an agreed proportion to the participants. The objective of reinsurance pools is that the short-term insurers want to obtain a more diversified insurance portfolio. A problem may arise when some of the participants transfer poor risks to the reinsurance pool in order to get rid of them, an act which will delete the objective of a reinsurance pool.

The preceding discussion highlights the fact that the contracts/methods of reinsurance provide the legal structure to obtain reinsurance, while the next section will pay attention to the contents of the related contracts.

### 4. BASES / FORMS OF REINSURANCE

The bases/forms of reinsurance are classified according to proportional and non-proportional reinsurance and consist of various forms of reinsurance (Carter, 1979:70-73; Diacon & Carter,

1992:224-229; Williams, Smith & Young, 1998:459). Proportional reinsurance occurs when the proportion of the *risk* that a short-term insurer cedes to the reinsurer, the proportion of the *premium* that is transferred to the reinsurer, and the proportion of every *loss* that the reinsurer pays, are all the *same* percentage. In the case of non-proportional reinsurance the proportion of the risk, the premium and the loss are different percentages. The various bases/forms of reinsurance which are classified under proportional and non-proportional reinsurance receive attention in the following sections.

#### 4.1 Proportional reinsurance

Proportional reinsurance consists of two bases, viz. the quota share and the surplus bases. When applying the *quota share* basis an agreed proportion of every insurance policy according to the reinsurance contract concerned, is ceded to the reinsurer. A short-term insurer must therefore transfer some risks which could have been retained for his own account. On the other hand, the quota share basis is easy to apply and is often used by short-term insurers who are entering new classes of insurance, have a recently established enterprise, or who want to improve their solvency margin.

The second type of proportional reinsurance basis, namely the *surplus* basis, specifies that only that part of the *sum insured* which exceeds the stipulated retention level (according to the reinsurance contract) is ceded to the reinsurer. Although the administration of the surplus basis may be more difficult than the quota share basis, the exposure of a short-term insurer to large individual risks is controlled by applying this basis of reinsurance.

#### 4.2 Non-proportional reinsurance

Three non-proportional bases are available. The first basis is called the *excess of loss* reinsurance basis, as the reinsurer(s) will be liable for that part of the *loss* which exceeds a stipulated retention level according to the reinsurance contract. For example, when the loss amounts to R1 million, the short-term insurer may be liable for the loss up to R300 000, whereafter the first reinsurer must settle the part of the loss between R300 000 and R800 000, while second reinsurer may be liable for the part of the loss exceeding R800 000. Various layers of reinsurance may therefore exist.

It should be emphasised that as the excess of loss basis represents non-proportional reinsurance, the short-term insurer will retain more than a proportional share of the premiums, compared to the amount of risk which he accepts, as he will have to pay *all* claims up to R300 000 before the two reinsurers may become liable. The same rationale applies when the first reinsurer receives proportionally more premium than the second reinsurer, as the first reinsurer will have to settle all losses between R300 000 and

R800 000 before the second reinsurer is liable for any loss exceeding R800 000.

The excess of loss reinsurance basis may either cover a particular risk (for example a block of flats), or a specific event (or events) when a catastrophe (for example a hail storm) occurs (Skipper, 1998:585). It should be clear that a short-term insurer may protect an entire class of insurance in its insurance portfolio by obtaining excess of loss reinsurance on an event basis, while customized reinsurance over several years seems to be the appropriate decision (Coords & Roberts, 1992:48-50).

The *excess of loss ratio* basis is the second non-proportional reinsurance basis which is available to short-term insurers. When the loss ratio (which equals the total claims during a specific period divided by the corresponding written premiums) exceeds a stipulated limit, the reinsurer becomes liable. It should be mentioned that the short-term insurer will usually experience an underwriting loss when the stipulated loss ratio is realized, whereafter the reinsurer and the short-term insurer will share any further losses. To protect the reinsurer, the contribution of the reinsurer will usually have an upper limit. To have adequate reinsurance cover available, a short-term insurer should thus conclude reinsurance contracts at the start of the period with multiple reinsurers who cover losses when exceeding different loss ratios.

The *stop loss* basis is the third type of non-proportional reinsurance cover which can be employed by short-term insurers. According to this reinsurance basis, losses experienced during a particular period are accumulated and are paid by the short-term insurer. When the total reaches a specified amount according to the reinsurance contract, the reinsurer is liable for all losses incurred during the remaining part of the period. The advantage of the stop loss basis is that the short-term insurer knows at the commencement of the period for which maximum loss amount he should budget. The stop loss basis may also be employed to stabilize the underwriting income of a short-term insurer and to provide catastrophe protection (Brown & Frank, 1998:S-26).

#### 4.3 Application of the bases / forms of reinsurance

The proportional and non-proportional bases can be employed in different situations (Diacon & Carter, 1992:229). When the reinsurance of an *individual risk* is considered by a short-term insurer, the quota share basis, the surplus basis or the excess of loss on a per risk basis are available. Should a short-term insurer need reinsurance for a particular *event or events*, only one reinsurance basis can be employed, viz. the excess of loss on an event basis. Two reinsurance bases are however available when reinsurance coverage is required for a particular *period*, namely the excess of loss ratio basis, as well as the stop loss basis.

## 5. FACTORS WHICH DETERMINE THE RETENTION LEVEL OF A SHORT-TERM INSURER

The retention level of a short-term insurer refers to the amount of risks *or* the amount of losses which he holds for his own account (Kostelni, 2009:73). The retention level (limit) of a short-term insurer may be influenced by a number of factors, of which the following are the most prominent ones. A short-term insurer may decrease its retention level in order to increase its *solvency margin* (as discussed in section 2). The *attitude* of a short-term-insurer towards a particular class (or classes) of insurance may also impact on its retention level for that class of insurance. If the short-term insurer does not view a particular class of insurance favourably, it is likely that he will lower his retention level for reinsurance pertaining that class of insurance.

Reinsurance contracts are usually employed for a period of time and short-term insurers must therefore adhere to the retention level stipulated in the *prevailing contracts*. Due to the *law of large numbers* (according to section 2) small insurance portfolios usually result in a wider fluctuation of claims than large insurance portfolios. Short-term insurers may therefore be proactive by lowering their retention level when small insurance portfolios are involved.

It is logic that the *expected underwriting results* of a short-term insurer for the current financial year will also be taken into consideration, lowering the retention level when poor underwriting results are forecasted. It is important to realize that reinsurance actually decreases the written premiums of a short-term insurer. The *required profitability* of an insurer over the *long run* should thus impact on the retention level of short-term insurer.

The *availability and cost* of reinsurance are influenced by the continuous insurance market cycle, bringing consecutive hard and soft markets along. The reinsurance market conditions will consequently impact on the retention level of a short-term insurer as it influences the availability and cost of reinsurance.

## 6. RESEARCH METHODOLOGY

The objective of this research focuses on the improvement of financial decision-making concerning reinsurance by short-term insurers. The view of the market leaders pertaining to the related topic is therefore of prime importance to enhance financial decision-making. As this research involves the South African short-term insurance market, the top 10 short-term insurers in the General Segment according to the

classification of the Financial Services Board, and who have their head offices in South Africa, were defined as the universe of this study. Those short-term insurers were considered as the market leaders as they represented 89,0% of the gross written premiums of the General Segment in 2007 (Santam Limited, 2008:11).

After compiling a questionnaire and mailing it with an invitation letter, addressed to the executive managers responsible for reinsurance, it was necessary to follow up. Nine completed questionnaires were eventually available, which represented 83,6% of the gross written premiums of the General Segment in 2007 (Santam Limited, 2008:11).

## 7. EMPIRICAL RESULTS

The empirical results of this survey focused on how often reinsurance was used due to various reasons, the contracts/methods of reinsurance, the bases/forms of reinsurance, as well as the factors which determine the retention level of a short-term insurer. The following sections contain the empirical results of these topics.

### 7.1 How often reinsurance was used due to various reasons

The responses of the short-term insurers concerning how often they used reinsurance due to various reasons, appear in the following table. A Likert interval scale was used, ranking the responses from always to never.

In order to obtain a clear depiction of how often the short-term insurers were using reinsurance due to various reasons, different weights were assigned to the responses received. The various reasons could thereafter be ranked to determine how often reinsurance was used due to the different reasons. It is of prime importance to mention that it was explicitly stated on the questionnaire that the Likert interval scale *always* forms a continuum in this study when used to obtain the responses. The calculation of weights was thereby made possible (Albright, Winston & Zappe, 2002:224-229 & 245).

The following weights were used for the various responses:

Always	Received a weight of 5
Very often	Received a weight of 4
Sometimes	Received a weight of 3
Seldom	Received a weight of 2
Never	Received a weight of 1

**Table 1.** How often short-term insurers used reinsurance due to various reasons

Used reinsurance due to the following reasons:	Always	Very often	Sometimes	Seldom	Never
Protection against large individual losses	9	0	0	0	0
Protection against fluctuations due to the portfolio size	1	0	6	2	0
Protection against aggregation of claims from one event	8	1	0	0	0
Protection against the accumulation of claims in one year	3	2	2	0	2
Providing underwriting flexibility and capacity	3	4	2	0	0
Improvement of the solvency margin of the insurer	2	1	3	2	1
Fluctuation in basic probabilities	1	1	5	1	1
Obtaining technical assistance from the reinsurers	1	0	2	4	2

The weighted responses on how often short-term insurers used reinsurance due to various reasons appears in Table 2.

**Table 2.** Weighted responses on how often short-term insurers used reinsurance due to various reasons, in a declining order of frequency

Total weighted score calculated	Declining order of frequency	How often short-term insurers used reinsurance due to the following reasons
45	1	Protection against large individual losses
44	2	Protection against aggregation of claims from one event
37	3	Providing underwriting flexibility and capacity
31	4	Protection against the accumulation of claims in one year
28	5	Improvement of the solvency margin of the insurer
27	6	Protection against fluctuations due to the portfolio size
27	6	Fluctuation in basic probabilities
21	8	Obtaining technical assistance from the reinsurers

The preceding table highlights the fact that protection against large *individual risks*, against the accumulation of claims from *one event*, as well as against the accumulation of claims in *one year* are some of the main reasons why short-term insurers used reinsurance most often. These risks may have the ability to completely destroy the financial basis of a short-term insurer. The main reason why reinsurance is obtained by a short-term insurer therefore embodies the protection of the financial structure of a short-term insurer.

It is interesting to note that the third reason for using reinsurance most often (in a declining order of

frequency according to Table 2) relates to the underwriting operational business of a short-term insurer. As the employment of reinsurance increases the underwriting flexibility and capacity of a short-term insurer, it enables an insurer to underwrite risks which would have been too large for acceptance by a short-term insurer without reinsurance.

Although the remaining reasons are also important, the protection of the financial structure of a short-term insurer and the enhancement of the underwriting operational business activities are the main reasons why the short-term insurers most often used reinsurance.

**7.2 Contracts/methods of reinsurance**

The responses of the short-term insurers regarding how often the various contracts/ methods are being

used for placing reinsurance is shown in the next table, using a Likert interval scale ranging from always to never.

**Table 3.** How often short-term insurers apply the various contracts/methods for placing reinsurance

Contracts / Methods	Always	Very often	Some-times	Seldom	Never
Treaty reinsurance	8	1	0	0	0
Facultative reinsurance	2	2	4	1	0
Facultative-obligatory reinsurance	0	0	2	6	1
Reinsurance pools	0	0	1	2	6

The results of Table 3 were also weighted in the same manner as previously by using the same weights. The weighted responses of the short-term

insurers on how often the various contracts/methods of reinsurance are employed by the short-term insurers, appear in the following table.

**Table 4.** Weighted responses on how often short-term insurers apply the various contracts/methods for placing reinsurance, in a declining order of frequency

Total weighted score calculated	Declining order of frequency	How often short-term insurers apply the various contracts/methods for placing reinsurance
44	1	Treaty reinsurance
32	2	Facultative reinsurance
19	3	Facultative-obligatory reinsurance
13	4	Reinsurance pools

The total weighted score calculated in the preceding table clearly shows that treaty reinsurance contracts are the type of contract which is most often employed in the short-term insurance industry. It is interesting to note that eight of the nine respondents always used this reinsurance contract. Facultative reinsurance contracts are also often used, but the facultative-obligatory contracts, as well as the

reinsurance pools, are only sometimes or seldom employed.

**7.3 Bases/forms of reinsurance**

The answers provided by the respondents about how often they used the various bases/forms of reinsurance, are shown in the following table, where a Likert interval scale, ranking the responses from always to never.

**Table 5.** How often short-term insurers apply the various bases/forms for placing reinsurance

Bases / Forms	Always	Very often	Some-times	Seldom	Never
Quota share basis	2	4	2	1	0
Surplus basis	5	1	1	1	1
Excess of loss basis	5	3	1	0	0
Excess of loss ratio basis	0	0	1	3	5
Stop loss basis	0	1	2	1	5

The empirical results of the preceding table were weighted in the similar manner as previously. The same weights were also used. Table 6 shows the

weighted responses of the short-term insurers on how often the various bases/forms of reinsurance are applied.

**Table 6.** Weighted responses on how often short-term insurers apply the various bases/forms for placing reinsurance, in a declining order of frequency

Total weighted score calculated	Declining order of frequency	How often short-term insurers apply the various bases/ forms for placing reinsurance
40	1	Excess of loss basis
35	2	Surplus basis
34	3	Quota share basis
17	4	Stop loss basis
14	5	Excess of loss ratio basis

The weighted results of the preceding table indicate that the short-term insurers employed the excess of loss basis most often. The reason should be obvious, as it provides adequate cover in the case of a loss due to an individual risk or an event, as well as the fact that the short-term insurer will receive more than a proportional share of the premium compared to the amount of risk which it bears.

The surplus basis seems to be the second popular basis (based on frequency) of reinsurance as short-term insurers may retain the part of the risks which does not exceed the specified sum insured. It is reasonable that the quota share basis would have been quite often used, especially when a short-term insurer wants to improve their solvency margin, is entering into a new class of insurance or has a recently established firm. It is interesting to note that these two bases of reinsurance are classified as proportional reinsurance.

The two bases of reinsurance which were least often used by the short-term insurers are non-

proportional bases and also provide reinsurance cover for a particular period. The first one is the stop loss basis which covers the loss in excess of an accumulated amount during a year. It is surprising that this basis is not very popular, as it is quite easy to apply and the short-term insurer can budget at the commencement of the insurance period for the maximum loss amount which he may have to settle. The reason why the short-term insurers used the excess of loss ratio basis only sometimes or seldom should be obvious, as it is usually complicated to employ.

#### 7.4 Factors which determine the retention level of a short-term insurer

The importance of the various factors which determine the retention level of a short-term insurer, as indicated by the respondents, appears in Table 7. A Likert interval scale was used, ranging from extremely important to not important.

**Table 7.** The importance of various factors when short-term insurers decide on their retention level

Factors	Extremely important	Highly important	Mode-rately important	Little important	Not important
The solvency margin of the short-term insurer	6	3	0	0	0
The attitude of the short-term insurer towards each particular class of insurance	4	3	1	1	0
The prevailing contracts of reinsurance concerning the short-term insurer	3	3	3	0	0
The size of the insurance portfolio of the short-term insurer	3	4	0	2	0
The expected underwriting results of the short-term insurer during the <i>current</i> financial year	6	2	0	1	0
The required level of profitability of the short-term insurer against the background of the associated risks over the <i>long run</i>	6	2	0	1	0
The availability and costs of reinsurance for the short-term insurer, due to a hard or soft reinsurance market	4	3	1	1	0

In the same manner as previously done, the following weights were assigned to the responses received from the short-term insurers:

- Extremely important Received a weight of 5
- Highly important Received a weight of 4
- Moderately important Received a weight of 3

- Little important Received a weight of 2
- Not important Received a weight of 1

The weighted responses of the short-term insurers on the importance of various factors when short-term insurers decide on their retention level, are shown in the next table.

**Table 8.** Weighted responses on the importance of various factors when short-term insurers decide on their retention level, in a declining order of importance

Total weighted score calculated	Declining order of importance	Importance of various factors when short-term insurers decide on their retention level
42	1	The solvency margin of the short-term insurer
40	2	The expected underwriting results of the short-term insurer during the current financial year
40	2	The required level of profitability of the short-term insurer against the background of the associated risks over the long run
37	4	The attitude of the short-term insurer towards each particular class of insurance
37	4	The availability and costs of reinsurance for the short-term insurer, due to a hard or soft reinsurance market
36	6	The prevailing contracts of reinsurance concerning the short-term insurer
35	7	The size of the insurance portfolio of the short-term insurer

The total weighted score calculated indicates that the solvency margin was the most important factor which the responding short-term insurers considered when setting their retention level. The next two factors are equally important according to the short-term insurers, namely:

- The expected underwriting results of the short-term insurer during the *current* financial year, and
- The required level of profitability of the short-term insurer against the background of the associated risks over the *long run*.

Although the remaining factors are also important according to the total weighted score calculated, it should be emphasised that the *financial stability* of a short-term insurer (as highlighted by the solvency margin), as well as the *financial performance* of the insurer in the current financial year and over the long-term are the most important factors which were mentioned by die respondents.

## 8. CONCLUSIONS

The empirical results of this study are important due to the following reasons:

- The responding short-term insurers are the *market leaders* in South Africa as they represent more than 83% of gross written premiums of the General Segment, and

- South Africa is a developing country with an emerging economy which can serve as an *illustration* for other developing countries.

The main conclusions of this study are as follows:

### (1) Reasons why reinsurance were used by short-term insurers

The empirical results show that protection against large *individual* risks, against the accumulation of claims from *one event*, as well as against the accumulation of claims in *one year* are some of the main reasons why short-term insurers used reinsurance most often.

Another reason for using reinsurance most often (in a declining order of frequency) relates to the increase of the *underwriting flexibility and capacity* of a short-term insurer, as it enables an insurer to underwrite risks which would have been too large for acceptance by a short-term insurer without reinsurance.

Although the remaining reasons are also important, the protection of the financial structure of a short-term insurer and the enhancement of the underwriting operational business activities are the main reasons why the short-term insurers most often used reinsurance



## (2) Contracts/methods of reinsurance

The total weighted score calculated clearly indicates that *treaty* reinsurance contracts are the type of contract which is most often employed in the short-term insurance industry.

*Facultative* reinsurance contracts are also often used, but the *facultative-obligatory* contracts, as well as the reinsurance *pools*, are only sometimes or seldom employed.

## (3) Bases/forms of reinsurance

The weighted results show that the short-term insurers employed the *excess of loss* basis most often. The reason should be obvious, as it provides adequate cover in the case of a loss due to an individual risk or an event, as well as the fact that the short-term insurer will receive more than a proportional share of the premium compared to the amount of risk which it bears.

The *surplus* basis seems to be the second popular basis (based on frequency) of reinsurance as short-term insurers may retain the part of the risks which does not exceed the specified sum insured.

It can further be expected that the *quota share* basis would have been quite often used, especially when a short-term insurer wants to improve their solvency margin, is entering into a new class of insurance or has a recently established firm.

The stop loss basis and the excess of loss ratio basis were least often used by the short-term insurers.

## (4) Factors which determine the retention level of a short-term insurer

The *solvency margin* is the most important factor which the responding short-term insurers considered when setting their retention level.

The next two factors are equally important according to the short-term insurers, namely the expected *underwriting results* of the short-term insurer during the *current* financial year, and the required level of *profitability* of the short-term insurer against the background of the associated risks over the *long run*.

Although the remaining factors are also important according to the total weighted score calculated, it should be emphasised that the *financial stability* of a short-term insurer (as highlighted by the solvency margin), as well as the *financial performance* of the insurer in the current financial year and over the long-

term are the most important factors which were mentioned by the respondents.

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