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Digging Deeper Into The Flaspöhler Survey Data: What Causes Direct Writers To Strongly Recommend A Reinsurer To A Colleague

By Rick Flaspöhler

(With special thanks to Nancy Wilde, PhD, for her invaluable work on this analysis.)

ollowing a trend that began between 2007 and 2009, the proportion of direct writers indicating they are "Very Satisfied" with the reinsurers they use climbed to 55 percent in 2013. This represents the highest level of direct writer satisfaction since 1999, when 59 percent of direct writers indicated they were "Very Satisfied" with the reinsurers they used. The highest level of satisfaction was recorded in 1995, when 67 percent of direct writers responded that they were "Very Satisfied" with their reinsurers.

Still, the ultimate and best measure of a direct writer's level of satisfaction with a reinsurer is how strongly they would feel about recommending that reinsurer to a friend or colleague.

To measure this very meaningful indicator, we use our Client Advocate Score (CAS), an analysis inspired by the net promoter measurement developed by Fred Reichheld. There is an abundance of literature available about the efficacy of this wonderful tool.

The application of CAS in looking at direct writer satisfaction with reinsurers is straightforward: When asked to indicate how likely they would be to recommend a reinsurer to a colleague, an answer of 9 or 10 on a 10-point scale indicates the highest levels of satisfaction with a reinsurer, while answers of 6 or below indicate both lack of satisfaction and a likelihood that a direct writer would caution a colleague against consideration of that reinsurer. Answers of 7 or 8 indicate neutrality.

Furthermore, individuals recommending a reinsurer at a level of 9 or 10 are considered advocates and, in practice, do recommend the reinsurer to colleagues, while those recommending a reinsurer at a level of 6 or below are considered detractors and, in practice, do caution colleagues about the reinsurer. Direct writers also rated reinsurers (on a scale of 1-9) on 10 important evaluation/selection factors. These factors were medical underwriting capabilities, financial value, financial security, strong client orientation, leading expertise & market knowledge, leading actuarial & product development expertise, timely service, effective training courses & seminars, strong claims handling, and capital management & reserve financing solutions.

THE SAMPLE

The goal of this analysis was to analyze the evaluation/ selection factors which were key drivers of CAS and specifically to identify those factors that are critical to whether a reinsurer is rated as an advocate (CAS rating of 9/10) or a detractor (CAS rating of 0-6).

The data for these analyses were restructured such that each supplier for each buyer was treated as a separate case. All of the Flaspöhler direct writer survey data for the years 2013, 2011 and 2009 were considered simultaneously. There were a total of 1,318 direct writer interviews with up to 13 reinsurers rated in each survey, for a grand total of 17,134 cases. However, there was considerable missing data, since direct writers are only asked the CAS questions about reinsurers they use, and the number of points per analysis was substantially lower than this. The sample size for capital management and reserve financing solutions was considerably



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smaller than for the other factors since this was only instituted in 2013. There were 537 ratings when only the first 10 factors were examined (i.e., excluding capital management & reserve financing solutions).

CORRELATIONS BETWEEN CAS SCORES AND FACTOR SCORES

The CAS raw score had a possible range from 0 to 10 and each factor score had a possible range of 1 to 9. As a preliminary analysis, we examined the correlation coefficients between the CAS raw scores and the factor scores for all available ratings. The sample sizes ranged from 471 (capital management & reserve financing solutions) to 4724 (strong client orientation) responses. There were large, positive, correlations between CAS scores and the factor scores-thus, as each factor score increased, so did the CAS scores. This relationship was particularly large for strong client orientation (r = .769), while the lowest correlations (albeit still moderately large) were for financial security (r = .476) and capital management and reserve financing solutions (r = .482). The remainder of the correlations ranged in magnitudes between .5 and .7.

As the primary goal of these analyses was to determine what drives a direct writer to give a reinsurer an advocate (9, 10) versus detractor (6 or lower) score, these categorizations were used in the analyses in the following sections (rather than CAS raw scores).

ANALYSIS OF SCORE CUT-OFFS USING ROC CURVES

Receiver operating characteristic (ROC) curves provide a useful way to evaluate the performance of classification schemes in which there is one variable with two categories by which subjects are classified. Although these methods are traditionally used in medicine, in this analysis, the classification variable is detractor versus advocate status. The procedure helps one determine at what cut-point (and with what level of accuracy) one can assume that the reinsurer falls in one group versus the other. For each cut-point, two measures of the usefulness of the classification scheme are provided. Sensitivity (Se) is the probability that a positive case (in this scenario, an advocate) is correctly classified. Specificity is the probability that a negative case (in this scenario, a detractor) is correctly classified. 1-specificity is the false positive rate (i.e., meaning that a detractor was falsely classified as an advocate).





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TABLE A

Sensitivity Table

	Medical	Medical Underwriting Capabilities Financial Value		Financial Security		Strong Client Orientation		Leading Expertise & Market Knowledge		Leading Actuarial Product Dev't Expertise		Timely Service		High Quality Risk Management Service		Effective Training Courses & Seminars		Strong Claims Handling Ability		Capital Mgmt & Reserve Financing Solutions		
Rating cut-off																						
(Advocate if ≥:)	C .	1 -	C .	1-	C .	1-	C -	1-	C .	1 -	C -	1-	C -	1-	C -	1 -	C -	1 -	<u> </u>	1 -	C .	1 -
4.50	Se	Sp	Se	Sp	Se	Sp	Se	Sp	Se	Sp	Se	Sp	Se	Sp	Se	Sp	Se	Sp	Se	Sp	Se	Sp
1.50	.998	.982	.999	.985	1.000	.995	1.000	.964	.999	.992	1.000	.981	1.000	.971	1.000	.983	.992	.915	1.000	.982	.961	.945
2.50	.997	.960	.999	.959	1.000	.982	1.000	.914	.997	.968	1.000	.949	1.000	.934	1.000	.970	.985	.848	1.000	.940	.961	.890
3.50	.995	.916	.998	.895	.997	.952	.997	.837	.996	.901	.995	.890	.998	.881	1.000	.928	.976	.731	1.000	.890	.956	.758
4.50	.992	.833	.989	.815	.995	.909	.995	.751	.994	.821	.991	.799	.996	.799	1.000	.879	.964	.627	.998	.834	.947	.659
5.50	.972	.525	.955	.504	.969	.698	.982	.498	.978	.546	.936	.461	.977	.543	.980	.545	.868	.365	.960	.585	.903	.484
6.50	.953	.341	.896	.307	.920	.526	.959	.281	.940	.340	.879	.277	.949	.365	.931	.328	.818	.251	.929	.455	.854	.319
7.50	.837	.136	.717	.111	.781	.304	.852	.080	.802	.122	.664	.089	.835	.130	.766	.124	.665	.109	.802	.232	.684	.099
8.50	.479	.038	.314	.024	.414	.131	.522	.010	.435	.029	.315	.017	.427	.031	.389	.025	.373	.037	.428	.057	.369	.022

Table A lists the sensitivity and 1-specificity values for every possible cut-off. The sensitivity value is the proportion of advocates with rating score results greater than the cut-off. The 1-specificity value is the proportion of detractors with scores greater than the cutoff. The challenge in each case is choosing a cut-off value that properly balances the needs of sensitivity and specificity.

For example, for medical underwriting capabilities, a cut off of 7.50 (scores greater than 7.5, i.e., scores of 8 or 9) had a sensitivity value of .837 and a specificity of .136. This means that using the criterion that scores of 8 or 9 are classified as advocate, 83.7 percent of advocates would be correctly classified and 13.6 percent of detractors would be incorrectly classified as advocates. This summary assists one in relating how the factor scores and CAS classifications interact. On some factors, one can see that there is relatively good separation of groups at a certain score point. The medical underwriting capabilities cut-off of 7.5 reported in this example has a high balance of sensitivity and specificity. For other factors, there is not as clear a separation between the CAS classifications at any score level. To illustrate, if one wanted a score with a sensitivity value of at least 90 percent on financial security, this would equate to a score of 6.5 or above; in other words at least 90 percent of the sample of advocates (92.0 percent, in fact) obtained financial security scores of 7, 8 or 9. However, 52.6 percent of detractors also obtained financial security scores of 7, 8 or 9. So, determining whether one is an advocate or a detractor based on financial security scores would not provide a very accurate classification.

CONSIDERATION OF FACTORS AS A GROUP METHODS

Logistic regression was used to determine which factor ratings were significant predictors of advocate versus detractor status, when all the factors were considered together. These results will differ from the analysis of the factors individually, due to high inter-correlations amongst the factors. The regression analyses clarify which factors are uniquely predictive of the CAS category. Stepwise procedures were used in an effort to elucidate the most important variables to model. Both forward and backward stepwise methods were used.

CAS levels were coded as detractor = 1, and advocate = 2; thus, the odds-ratios indicate the odds of being in the advocate group, divided by the odds of being in the detractor group. An odds ratio of 1 indicates that the odds of being in the advocate group is equal to the odds of being in the other detractor group, when the value of the predictor increases by one unit (e.g., a change of 6 to 7 on the factor). In other words, the odds are equivalent and there is no relationship between the predictor and the outcome. Odds-ratios significantly greater than one indicate greater odds of being the advocate group in comparison to the detractor group with an increase in the predictor.

RESULTS

Using forward and backward stepwise methodologies, three factors were entered into the prediction of CAS advocate versus detractor ratings. These were strong

TABLE B

Note. N = 1798; all "Advocate" suppliers with a rating score on at least one factor are included. Table 1. Percent of "Advocates" receiving the number of factor rating scores or less

		Number of Ratings Obtained AT OR LESS THAN Each Level												
		zero	one	two	three	four	five	six	seven	eight	nine	ten	eleven	
Distribution	1	99.1	.8		.1									
of Rating	2	98.7	1.1	.1	.1									
Scores (%)	3	97.4	2.3	.1	.2		.1							
	4	95.3	4.1	.3	.2		.1							
	5	81.9	13.4	3.2	1.1	.2	.1	.1	.1					
	6	70.5	18.6	5.2	3.0	1.7	.6	.3	.1	.1				
	7	41.4	23.2	13.8	8.7	6.0	2.6	2.4	1.1	.4	.3	.2		
	8	10.7	11.8	12.7	13.8	13.1	11.1	9.8	6.7	4.6	2.4	1.8	.5	
	9		2.2	2.6	6.1	10.5	13.6	13.2	13.3	13.0	11.3	10.7	3.4	

client orientation first, then financial security, and finally medical underwriting capabilities. However, cross-validation of the model with only those three predictors entered (which was conducted on the sample of 1,513 cases with scores on these factors) revealed that financial security did not enter the model. Thus, when all factors and their inter-correlations are considered, the results are suggestive of strong client orientation and medical underwriting capabilities being the most important predictors in differentiating between advocate and detractor rated suppliers. In the larger sample, the logistic equation explained between 57 percent to 77 percent of the variance in CAS ratings (as indicated by Cox & Snell and Nagelkerke R square values). The logistic equation was as follows:

 $\log\left(\frac{p(Advocate)}{1 - p(Advocate)}\right) = -15.018 + 0.612 Medical Underwiting + 1.530 Strong Client Orientation$

This equates to an odds ratio of 1.844 for medical underwriting (95 percent CI = 1.585 to 2.145), and an odds ratio of 4.617 for strong client orientation (95 percent CI = 3.806 to 5.601).

Therefore, there was an approximate 80 percent increased odds of being in the advocate group compared to the detractor group with each one-point increase in the medical underwriting score. There was an approximate 360 percent increase in the odds of being in the advocate group compared to the odds of being in the detractor group, with each successive one-point increase in the strong client orientation score. Using this logistic model, 90.6 percent of the 1,513 cases were correctly classified.

NUMBER OF POSITIVE RATINGS AND ADVOCATE STATUS

The goal of this section was to look across factors and examine the distribution of the number of ratings that advocates obtained. Thus, the particular factors were not important to this analysis, but rather how many rating scores of 1, 2, 3 and so on were obtained by the group. The group consisted of 1,798 advocate rated reinsurers with at least one factor rating.

For these analyses, we tabulated the number of ratings obtained at each level <u>or less</u>.

For example, 95.3 percent of advocate rated reinsurers had zero ratings of 4 or less (i.e., no ratings of 4, 3, 2, or 1). It can also be seen that 81.9 percent of advocate rated reinsurers did not have any scores of 5 or less, and 70.5 percent of advocate reinsurers did not receive any scores of 6 or less.

SUMMARY OF FINDINGS

An abundance of useful information was found as a result of the full analyses of the data, but the most useful findings were these:

1. It is important for reinsurers to avoid weakness on any factor. Only 4.7 percent of reinsurers receiving



any rating of 4 or less, on any factor, managed to earn an advocate rating (9,10). Furthermore, only 5 percent of reinsurers receiving two or more 6 ratings, on any factors, earned an advocate rating.

- 2. Strong client orientation and medical underwriting capabilities are more important than other factors to earning an advocate rating from direct writers. Ninety-five percent of reinsurers receiving advocate scores also earned a rating of 7 or higher on these two factors.
- 3. While financial security might be important to direct writers in whether to consider a reinsurer, it is not a good predictor of whether a direct writer will recommend a reinsurer. More than 30 percent of reinsurers receiving a detractor rating received a financial security rating of 8 or 9.

In conclusion, while upward trends in overall direct writer satisfaction appears to be a positive development for the reinsurance industry, analysis and exploration of the data is ongoing in order to help reinsurers best meet the evolving needs of direct writers.

If you would like to receive the complete 18-page analysis of the data, please email Rick Flaspöhler (rflaspohler@frsurveys.com). Rick will be happy to send you a PDF file of the complete findings.