ACME Insurance
Excess of Loss
Risk Transfer - Simulation Analysis

Table 1 - Summary of Terms - Contract #2

Inception Date	1/1/2008
Estimated Subject Premium	10,000,000
Provisional Reinsurance Rate	8.50%
Provisional Premium	800,000
Maintenance Fee	50,000
Retention	250,000
Limit	250,000
Swing Rate	
Swing Loss Ratio	75.0%
Minimum Rate	6.00%
Maximum Rate	11.00%
Reinsurers Expenses as % of Prem.	
Brokerage	*10.0%*
Underwriting Exp.	*7.0%*
Federal Excise Taxes	*1.0%*
Modeled Loss Ratio	120.0%

Table 2 - Simulation Assumptions

Model Severity ALAE		Model Frequency	
Lognormal distribution		Poisson distribution	250
Mean	30,000		
Standard Deviation	120,000		
Minimum Loss	0		

Table 3 - Results

Frequency	Sum of Col (10) / 10,000	10.4%
Severity	Sum of Col (9) / Sum of Col (10)	-20.1%
ERD as a % of Reins Prem.	ERD / Reinsurance Premium	-2.09%

Table 4 - Percentiles

Percentile	NPV Of Reinsurer Loss
75%	0.0%
80%	0.0%
90%	-1.0%
95%	-16.5%

Claim #	Direct Loss and LAE (1)	Ceded Loss and LAE (2)	NPV Ceded Loss and LAE (3)	Provisional Premium (4)	Experience Adjustment (5)	Commutation Fee (6)	Final Premium and Fees (7)	NPV Treaty Premium Net of Rate Swing (8)	NPV Reinsurer Gain/Deficit (9)	NPV Reinsurer Deficit as a % of NPV of Treaty Premium (10)	Frequency of Deficit (11)
1	1,758	0	0	800,000	250,000	50,000	1,100,000	1,056,133	204,656	0.00%	0
2	3,566	0	0								
3	2,762	0	0								
4	15,271	0	0								
5	5,648	0	0								
6	11,158	0	0								
7	39,765	0	0								
8	326,745	76,745	68,050								
9	36,936	0	0								
10	10,469	0	0								

Column
(1) Based upon the model assumptions in Table 2
(2) Ceded loss based upon the treaty terms
(3) Col (2) x Appendix B, Page 3
(4) Estimated subject premium times provisional reinsurance rate
(5) Actual modeled loss ratio minus swing loss ratio + provisional reinsurance rate; subject to Maximum and Minimum rate
(6) Assumes fee to commute under all scenerios
(7) (4) + (5) + (6)
(8) Page 2 Col (4b) + Col (5) / [(1 + Interest rate) ^ 2.0833] + Col (6) / [(1 + Interest rate) ^ 5.0833]
(9) Col (8) - sum of Col (3)
(10) If Col (9) < 0 then Col (9) / Col (8) else 0
(11) If Col (9) < 0 then 1 else 0

Discount Rate Assumption:

(1)	Interest Rate	3.5%
(2)	Discount Factor	0.976

Time of Payments in Months (3)	Premium (4a)	NPV of Premium (4b)
4	200,000	197,720
7	200,000	196,027
10	200,000	194,348
13	200,000	192,684
Total	800,000	780,778

Column/Row	Note
(1)	Selected
(2)	Total Col (4b) / Total Col (4a)
(3)	Month premium is due, assumes quarterly payments due one month after quarter end
(4a)	Reinsurance Premium divided by 4, assumes quarterly payments
(4b)	Col (4a) / {[1 + Col (1)] ^ (Col (3) / 12)}

Discount Rate Assumption:

(1)	Interest Rate	3.5%
(2)	Discount Factor	0.887

Years of	% of Ultimate Paid		Discounted
Maturity	Cum.	Incr.	Payment
(3)	(4)	(5)	(6)
0	0.00%	0.00%	0.00%
1	19.27%	19.27%	18.94%
2	42.02%	22.75%	21.61%
3	58.15%	16.13%	14.80%
4	68.72%	10.57%	9.37%
5	75.41%	6.69%	5.73%
6	79.71%	4.29%	3.55%
7	82.97%	3.27%	2.61%
8	85.24%	2.27%	1.76%
9	87.01%	1.76%	1.32%
10	88.41%	1.40%	1.01%
11	95.50%	7.09%	4.94%
12	100.00%	4.50%	3.03%
13	100.00%	0.00%	0.00%

Column/Row	Note
(1)	Selected
(2)	Sum Col (6) / Sum of Col (5)
(4)	Industry workers compensation benchmarks
(5)	Current (4) - prior (4)
(6)	Col (5) discounted to time zero