



AMERICAN ACADEMY *of* ACTUARIES

AN UPDATE TO P/C RISK-BASED CAPITAL UNDERWRITING FACTORS: SEPTEMBER 2007 REPORT TO THE NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS P/C RISK-BASED CAPITAL WORKING GROUP

American Academy of Actuaries’ P/C Risk-Based Capital Committee

This report was prepared by the Academy’s P/C Risk-Based Capital Committee.

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Executive Summary

At the request of the National Association of Insurance Commissioners (NAIC), the American Academy of Actuaries' Risk-Based Capital Committee (Committee) examined the underwriting risk charges used in the NAIC Risk-Based Capital (RBC) formula.

Components of the Committee's work included:

- 1 Updating the original 1991 actuarial analysis underlying the RBC charges for the reserving and premium components based on 2005 data. A similar analysis was last done using 2002 data and documented in an Academy report to the NAIC dated June 25, 2004. In accordance with that report's recommendation, the analysis was not adopted.
- 2 Calculating indicated factors using 2005 data and a refinement in the methodology designed to produce indicated charges that are more dependent on the data, with less need for judgment.
- 3 Calculating updated investment income offset factors.
- 4 Analyzing the impacts of adopting the indicated factors based on the recommended methodology.

The majority of the RBC factors for reserving and premium, along with the investment income offsets, have not changed in over ten years. Changes have been made in response to changes in Schedule P itself, as when medical malpractice was separated into claims made and occurrence components, and changes to the reinsurance lines. Since the establishment of the factors using 1991 data, the insurance industry has experienced a soft market with attendant poor underwriting results and reserve deficiencies, followed by a hard market with increased price levels and reserve redundancies in many lines.

The original 1991 approach to determining the factors was based on a "rule of thumb" approach, but it resulted in calculated factors that varied so widely by line of business that they could not be adopted as indicated. The bridge from the calculated factors to those that were ultimately adopted was documented only at a conceptual level, so they cannot be readily reproduced. To a great extent, the lack of updated factors since the early 1990s is due to this lack of documentation surrounding that bridge.

The Committee duplicated the rule of thumb approach and, as with the 1991 results, the results varied widely compared to the existing factors and compared to expectations of what constitutes a fair reflection of the risk in each line. (See Appendix I.) Therefore, using the existing methodology applied to the 2005 data, updated factors could not be readily adopted without the need for substantial adjustment.

The Committee deliberated about an appropriate methodology to recommend as a replacement to the rule of thumb approach. Members considered the following criteria:

- 1 Simple to apply and understand;
- 2 Responsive to actual history and underlying risk;
- 3 Easily reproducible by future practitioners;

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- 4 Statistically relevant;
- 5 Resulting in indications that could be adopted without disruptive swings in required capital for regulated companies.

The Committee considered the scope of its work to be limited to updating the underwriting risk factors within the existing RBC approach. Some Committee members noted that some aspects of the RBC formula itself could be improved. For example, the formula could vary capital factors by size of company or better account for diversification. While these and other suggestions may be valid, the Committee considered the scope of this report to be a factor update; thus, the Committee considered improvements in the RBC formula to be beyond the scope of this report.

The Committee calculated indicated factors using a revised methodology that was generally based on percentiles selected from filtered historical data over the past ten years. Recognizing that even ten years is a short history for such an analysis, minimums and caps were applied to guard against spurious answers or unreasonable changes. The caps were constructed to separately cap the change in pricing and reserving capital requirements at 35% for any line. The resulting factors are shown in Appendix II.

Even with about half of the indicated factors reaching the caps, the recommended approach produces factors that are at least responsive to the actual underwriting risk indicated by the history. Future updates would likely eliminate the need for extensive capping since this recommended revision better aligns the charges with indicated values. The Committee believes that the updated methodology results in factors that could be used in the RBC formula.

Committee Recommendation

The Committee recommends that the NAIC consider adopting factors resulting from the revised methodology since they are more aligned with the five criteria set forth above. The Committee recommends that the NAIC examine assumptions made in the analysis such as credibility, capping, and minimum charges to ensure that the methodology is consistent with NAIC philosophy. The Committee is willing to work with the NAIC in developing any changes, revisions, or scenarios it may find helpful. After adopting changes, the Committee recommends updating these factors every two to three years to preserve their reliability. With more frequent updates, the Committee expects relative stability in any single revision given the expected data overlap and the more frequent incremental adjustments in response to changes in the risk environment.

Background

The underwriting risk is divided into two categories, reserve risk and pricing risk, and is quantified by applying two sets of factors by line, resulting in capital charges. These factors are the “Reserve Runoff Ratio” and the “Loss and Loss Expense Ratio”. In the RBC formula, these factors are used in conjunction with modifications for company-specific data. It appears that RBC industry factors were last calculated in 1993 using data from 1991 and earlier. The short tail lines were combined until their 1999 split.

Data reported in Schedule P of the NAIC Statutory Blank is used in the calculation of the industry factors. While not perfect, this data is the best available. The data can be affected by unusual, retrospective, or finite reinsurance treaties, company mergers, spurious ratios resulting from low

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volumes, and even errors. The Committee used a screening and filtering procedure to eliminate inappropriate data points while retaining the variation that the factors are intended to reflect.

The data underlying the analysis of the factors is discussed in more detail below.

Existing Methodology

Reserving RBC Charge

This charge reflects the risk of adverse loss and defense and cost containment expense (DCCE) development on currently reported reserves. As pointed out in Feldblum's paper¹, this charge does not measure the adequacy of a company's carried reserves. The Committee used the most recent ten years' worth of Schedule P data from the NAIC to calculate the industry factors.

The data underlying the calculation of the reserve runoff ratio is developed from a numerator and a denominator. The numerator is the change in estimated ultimate incurred losses between two statement dates. This data comes from Schedule P, Part 2. The denominator is the held loss reserves at the earlier of the two statement dates. The ratio is then calculated by individual company, by Schedule P line of business, and by statement date. For each line of business, the result is a matrix (size = number of companies by 9) of these ratios. At this point, companies are discarded if they have less than ten years' worth of data, negative incurred values, or negative reserves. A simple average is then taken for each statement date and the largest average forms the basis, after an investment income adjustment, for the reserving RBC charge.

The NAIC provided the Committee with Parts 2 and 3 of Schedule P for each individual company. This data included the ten year runoff available in company electronic filings for the short tail lines.

Using Part 2 data to obtain the numerator discussed above, incurred development was calculated between each statement date and 2005 for each accident year for each company. The accident year data, including the runoff in the prior line for long tailed lines, was then summed by statement date to get a 1 by 9 matrix (company by statement date) of incurred development, where development is measured by statement date relative to 2005. Call the numerator "A".

For the denominator, the Committee determined case and incurred but not reported (IBNR) reserves for each accident year and statement date for each company using the difference between Part 3 and Part 2. The accident year data was then summed by statement date to get a 1 by 9 matrix (company by statement date) of reserves. Call the denominator "B".

The unfiltered runoff ratio is then calculated as A/B. However, the Committee applied several filters to minimize "noise" in the data. These filters were as follows:

- Elimination of companies with negative paid values in any accident year at any statement date
- Elimination of companies with negative reserves in any accident year at any statement date (used below -5,000 to account for rounding errors between Part 2 and 3)

¹ Feldblum, Sholom. "NAIC Property/Casualty Insurance Company Risk-Based Capital Requirement," Proceedings of the Casualty Actuarial Society (PCAS) LXXXIII, 1996. (See <http://www.casact.org/pubs/proceed/proceed96/96297.pdf>, last viewed on September 5, 2007.)

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- Elimination of companies with negative incurred loss and DCCE in any accident year at any statement date
- Elimination of companies that did not have a full ten years' worth of accident year data
- Runoff ratios were capped at -100% and +400%; removing this cap did not have a significant effect on the averages for most lines

Premium RBC Charge

This charge formula reflects the risk that a company's future business could be unprofitable. As pointed out in Feldblum's paper, the premium charge uses a time horizon of one year and captures the potential underwriting losses that may occur during the following year. The most recent ten years' worth of Schedule P data from the NAIC was used to calculate industry factors.

For each company, the loss and loss adjustment expense (LAE) ratios are determined by accident year and by line of business, using the past ten years' worth of data from Schedule P, Part 1. For short tail lines, the ten-year history from companies' electronic filings is used. Simple averages are then taken by line and accident year across all companies, and the highest loss and LAE ratio, adjusted for investment income, is chosen to determine the premium charge.

For the premium charge, the NAIC provided net earned premium, incurred loss, and LAE data from Part 1 for each individual company. The Committee used this data to obtain loss ratios by accident year for each company. The following filters were applied to the loss ratios to minimize "noise" in the data:

- Elimination of companies with an average accident year earned premium of less than \$500,000
- Elimination of companies with a loss ratio of 0% for any accident year
- Elimination of companies with a net earned premium for any accident year of less than 20% of the average earned premium for all accident years (as this indicated too much fluctuation in premium volume)
- Limitation of loss ratios to 300% maximum

Investment Income Offsets

The Committee calculated and included investment income offset (IIO) factors as part of this update. The Committee used composite industry Schedule P data from the 2005 AM BEST Aggregates and Averages² to determine payment patterns, and the Committee applied an interest rate of 5%. The 5% rate is consistent with the original methodology and is also conservative in comparison to current prevailing rates. A methodology similar to the tax methodology was employed, but the Committee used its judgment in determining the tail extension. This approach is similar to the original methodology. The Committee checked the resulting discount factors for consistency by comparing them with those in Internal Revenue Bulletin 2005-49³ showing industry patterns to apply to accident year 2005 in tax returns. Appendix III shows the calculation of the factors. On an all-lines-combined basis, the indicated weighted discount factors are within 1.3% points of the current factors.

² A.M. Best, "Best's Aggregates & Averages – Property/Casualty – United States & Canada," 2005 Edition. This document may be purchased from www.ambest.com.

³ Internal Revenue Bulletin 2005-49. Revised Procedure 2005 - 72 (Insurance companies, loss reserves, discounted unpaid losses), pages 1078 -1089. (See www.irs.gov/pub/irs-irbs/irb05-49.pdf, last viewed on September 5, 2007.)

Recommended Methodology

Initial Selection of Runoff Ratios and Loss and Loss Expense Ratios

The recommended methodology starts with the same filtered, capped data as the existing methodology. However, instead of selecting the worst arithmetic average of companies over the past ten years, the 87.5 percentile of all data points is used. Each combination of company and year is considered a data point in arriving at the 87.5 percentile. The 87.5 percentile was selected because it presents a conservative view of the risk in each line but is also broadly consistent with the existing factors. By selecting a percentile broadly consistent with current factors, a consistent level of risk can be better reflected in the selected factors. It also minimizes the impact of the cap, allowing factors to more readily approach the indicated levels.

Consistent with the original calculation of these factors, pooled companies are included in the data and would add multiple similar observations.

A minimum of 5% after application of the investment income factor was selected as the indicated “charge” in a few cases in which the 87.5 percentile indicated little or no charge. The industry Loss and LAE ratio, or Reserve Runoff ratio, was then backed into to achieve the 5% result.

This methodology contains an implicit assumption that development for each past reserve date or accident year is essentially complete at the last year-end. However, the data contains one reserve date/accident year that is one year developed, another that is two years developed, and so forth. This is a practical limitation of information available at any given time, but it may introduce bias if the industry is systemically over- or under-reserved at the evaluation date.

Even though the 87.5 percentile is statistically based, its use does not imply an 87.5% confidence that the capital charge is adequate. All other things being equal, this would result in greater confidence than 87.5% due to diversification by line, although some reflection of diversification is included by the concentration factors. However, companies differ in their risk levels of business written or in their reserving or pricing policies, even within a single line. In addition, the confidence depends on covariance by line and the line distribution within a given company. Since the determination of the factor at the 87.5 percentile is consistent by line, it should produce greater consistency in the reflection of risk by line while still maintaining the simplicity of the static factor-based approach used in the current RBC calculation.

Capping

In arriving at the indicated ratios using the recommended methodology, the capping process was intended to accomplish the following:

- 1 Control the change in indicated industry charge to a specified amount for each line of business;
- 2 Include changes in IIO in the cap;
- 3 To the extent possible, allow the capped factors to float to the indicated values to improve the consistent reflection of risk by line.

The Committee recommends that the cap be applied to the actual result of the charge shown in formulas (1) and (2) below. Since company experience is factored into the RBC calculations, the

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actual impact will often be less than the cap. In addition, the underwriting risk changes are only a portion of the totality of RBC. For this reason, a fairly wide band of capping can be used, and the recommended methodology is demonstrated using a 35% cap.

In capping calculations and in estimating impacts, an industry underwriting expense ratio of 25.5% was used. This factor was derived using NAIC data and represents aggregate industry underwriting expenses divided by aggregate industry net written premium.

As shown in Appendix II, about half of the factors, by count and by weighted RBC charge, would be affected by caps. This implies that while this would be an important first step in moving RBC towards statistically derived factors consistent with the principles above, it would not accomplish that goal all in one step. Subsequent revisions would be expected to result in a greater proportion of lines and factors at the actuarially indicated levels, while still maintaining stability in any individual year through the use of capping and minimum charges. Uncapped changes are shown in Appendix II.

Effects

The Committee performed several calculations to calibrate the effects of the factor changes. The Committee based these calculations on the effect on the capital charge itself, not the change in the underlying factor. The Committee also understood that underlying changes in individual companies will result in changes to RBC, but the Committee focused on the effects of the industry charges themselves. For example, the Committee examined the following main calculation for the reserving charge:

Formula (1)

$$\text{Reserve Charge Percentage Change (capped at 35\%)} = \frac{(\text{Indicated Runoff Ratio} * \text{Indicated IIO} - 1)}{(\text{Current Runoff Ratio} * \text{Current IIO} - 1)} - 1$$

Similarly, for the pricing charge:

Formula (2)

$$\text{Pricing Charge Percentage Change (capped at 35\%)} = \frac{(\text{Indicated Loss and LAE Ratio} * \text{Indicated IIO} + \text{Industry Underwriting Expense Ratio} - 1)}{(\text{Current Loss and LAE Ratio} * \text{Current IIO} + \text{Industry Underwriting Expense Ratio} - 1)} - 1$$

In both cases, to get the capped Indicated Runoff Ratio (or Indicated Loss and LAE Ratio), the percentage change was capped at 35%, and the equation solved for the Indicated Ratio.

To calibrate the percentile chosen, the Committee calculated the overall impact, weighted by industry reserves and premiums of the change in industry factors chosen as described above. The relatively small change of -3.1% (based on industry factors alone) in overall capped RBC demonstrates that factors are moving toward a consistent level. Completely uncapped, the overall change would have been about +9%, driven mainly by increases in the reinsurance lines. Excluding the reinsurance lines, the uncapped change would have been about -1.4%.

In practice, many individual insurer groups are concerned about changes in their specific niche or specialty. To gauge this, the Committee calculated changes in line groupings it felt commonly

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reflected certain groups. Capped changes in the recommended methodology result in the following changes by line groupings:

Changes in Indicated RBC from Current RBC Using Industry Reserve and Premium Balances and Industry Factors


	Percentage change in estimated impact using industry factors alone		
	Reserve	Premium	Total
HO/PPA/APD	-35.0%	-15.9%	-22.5%
CMP/WC/CA/OL/SP/PL	-0.8%	-3.5%	-1.5%
Reinsurance	35.0%	35.0%	35.0%
Medical Malpractice	-14.9%	35.0%	-2.2%
Overall	-0.9%	-6.5%	-3.1%

Indicated factors go in the direction of increasing RBC for reinsurers, decreasing RBC for personal lines insurers, and maintaining a fairly moderate level for commercial lines and medical professional insurers.

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Test of Selected Factors for Random Sample of Companies

The Committee tested the selected factors from the recommended methodology on a small group of companies to determine how the authorized control level (ACL) amounts and RBC ratios would be affected. The RBC data was provided by the NAIC. Consistent with our other measures of impact, the 1% increase in ACL for our sample companies is close to the 3% decrease from Appendix II but is closer to zero, as expected, due to the use of company-specific factors. The insurers with increasing ACL (a, i, k) are primarily reinsurance writers. The following table illustrates the results:

Co	Current ACL RBC (000's)	Current RBC Ratio	New ACL RBC (000's)	New RBC Ratio	% Change in ACL \$'s (- is increase)	Change in RBC Ratio
a	369,567	295%	470,128	232%	-21%	-63%
b	2,631,017	574%	2,337,682	646%	13%	72%
c	1,879,877	258%	1,851,917	262%	2%	4%
d	2,824	684%	2,732	707%	3%	23%
e	8,391	478%	8,429	476%	0%	-2%
f	19,483	309%	20,829	289%	-6%	-20%
g	2,064,130	331%	2,113,950	323%	-2%	-8%
h	625,290	456%	621,490	459%	1%	3%
i	338,022	308%	402,276	259%	-16%	-49%
j	166,573	251%	145,606	287%	14%	36%
k	357,157	214%	409,677	187%	-13%	-27%
l	1,493	373%	1,545	361%	-3%	-13%
m	891,195	860%	993,773	771%	-10%	-89%
n	937	352%	884	374%	6%	21%
o	944,429	392%	971,537	382%	-3%	-11%
p	259,525	444%	238,853	483%	9%	38%
q	5,690	377%	5,469	392%	4%	15%
total	10,565,602	 409%	10,596,777	405%	-1%	-4%

Appendix I: Calculation Using the 1991 Methodology

(The following information is provided for example purposes only and does not reflect or purport to reflect a practice guideline.)

Example of Reserving Charge Calculation:

Exhibit I is a sample of some company’s numerators for the homeowners line. The “Sum of 2001” column shows 8,685 for company #10043, representing the change in the incurred ultimate between 2001 and 2005. Notice that the last column in Exhibit I is all zeros.

Exhibit II shows the corresponding denominators for these companies. The “Sum of 2001” column shows 11,866 for company #10043, representing the loss reserves held at the end of 12/31/2001.

Exhibit III displays the adverse development (or “runoff”) ratios for these companies. The 73.2% in the 2001 column for company #10043 is the 8,685 of Exhibit I divided by the 11,866 of Exhibit II.

Exhibit IV shows the data to be used in the final calculation after filtering. In Exhibit I, the Committee started with 1,016 companies, but, by Exhibit IV, the number has been reduced to 410 companies’ worth of usable data due to the filtering.

Simple averages are calculated for each statement date. The summary of the simple averages and other averages are in Exhibit V. A runoff ratio of 3.5% would initially be selected as the worst case average. (This is the main difference from the revised methodology, in which a percentile of all observations was used.)

Appendix I, Exhibit I (Reserve Runoff Ratio numerator)

Co Id	Sum of 1996	Sum of 1997	Sum of 1998	Sum of 1999	Sum of 2000	Sum of 2001	Sum of 2002	Sum of 2003	Sum of 2004	Sum of 2005
10006	-5200	-3622	-4398	-4366	-6036	83	-2167	-1356	-904	0
10014	-157	-79	-62	-42	-81	330	14	13	15	0
10017	-290	-469	-70	80	107	-101	-216	-205	-115	0
10019	-152	-183	-135	-270	0	0	0	0	0	0
10022	-2432	-2657	-2458	-2256	-1598	-552	-78	156	-154	0
10025	-9	-11	84	2	-30	-89	11	106	-40	0
10030	6	2	13	13	2	5	0	5	-7	0
10043	150	144	135	1450	3053	8685	210	-723	807	0
10046	-10	-129	30	102	403	818	363	283	179	0
10052	-38	-83	2	-9	315	565	208	-256	-241	0
10054	61	41	412	356	228	250	268	0	0	0
10060	-29	-39	-43	-47	14	-32	-32	-92	-56	0
10062	-80	14	-35	44	-263	-483	-855	-900	-580	0
10070	761	580	4124	-889	-20	671	294	167	125	0
10100	-81	99	66	294	489	1084	1827	1241	1048	0
10103	-239	-1377	-683	5115	4230	4953	2654	-2543	-6955	0
10111	-718	-3619	-1331	-2648	443	-2749	-4206	-2057	-3577	0
10176	7	0	0	0	0	0	0	0	0	0
10184	0	0	0	0	0	0	0	0	0	0
10213	-147	-207	-182	-103	-32	-88	-313	-304	27	0

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Appendix I, Exhibit II (Reserve Runoff Ratio denominator)

co id	Sum of 1996	Sum of 1997	Sum of 1998	Sum of 1999	Sum of 2000	Sum of 2001	Sum of 2002	Sum of 2003	Sum of 2004	Sum of 2005
10006	10774	12158	14431	10903	9899	1415	3233	2032	1491	295
10014	202	178	136	123	128	106	608	306	355	590
10017	723	921	636	517	628	740	780	1002	926	1035
10019	293	413	292	346	0	0	0	0	0	0
10022	5448	5985	5524	5824	6022	5506	4671	4857	4297	4954
10025	27	60	95	128	170	192	112	220	265	203
10030	95	92	66	49	52	53	57	54	60	69
10043	649	1305	1980	2788	4605	11866	16665	7807	4158	2867
10046	2513	2432	2408	2373	2752	2477	2940	3157	2842	1830
10052	579	556	589	680	1246	1622	2076	2402	2791	2734
10054	822	266	455	423	153	57	25	0	0	0
10060	489	499	546	559	527	470	483	531	476	440
10062	243	366	866	1082	1189	2242	2167	2161	2431	2690
10070	358	354	857	2701	1129	293	379	303	362	298
10100	331	577	863	726	1161	1405	1459	2895	4957	8329
10103	20414	14405	18539	18716	23120	25622	32836	45036	34234	24197
10111	14105	11781	9813	9311	9076	10586	13594	13069	14521	20511
10176	9	15	0	0	0	0	0	0	0	0
10184	0	0	0	0	0	0	0	0	0	1819
10213	706	705	762	732	702	765	919	954	868	1345

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Appendix I, Exhibit III (Reserve Runoff Ratios = Ex I/Ex II)

CO ID	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
10006	-48.3%	-29.8%	-30.5%	-40.0%	-61.0%	5.9%	-67.0%	-66.7%	-60.6%	
10014	-77.7%	-44.4%	-45.6%	-34.1%	-63.3%	311.3%	2.3%	4.2%	4.2%	
10017	-40.1%	-50.9%	-11.0%	15.5%	17.0%	-13.6%	-27.7%	-20.5%	-12.4%	
10019	-51.9%	-44.3%	-46.2%	-78.0%						
10022	-44.6%	-44.4%	-44.5%	-38.7%	-26.5%	-10.0%	-1.7%	3.2%	-3.6%	
10025	-33.3%	-18.3%	88.4%	1.6%	-17.6%	-46.4%	9.8%	48.2%	-15.1%	
10030	6.3%	2.2%	19.7%	26.5%	3.8%	9.4%	0.0%	9.3%	-11.7%	
10043	23.1%	11.0%	6.8%	52.0%	66.3%	73.2%	1.3%	-9.3%	19.4%	
10046	-0.4%	-5.3%	1.2%	4.3%	14.6%	33.0%	12.3%	9.0%	6.3%	
10052	-6.6%	-14.9%	0.3%	-1.3%	25.3%	34.8%	10.0%	-10.7%	-8.6%	
10054	7.4%	15.4%	90.5%	84.2%	149.0%	438.6%	1072.0%			
10060	-5.9%	-7.8%	-7.9%	-8.4%	2.7%	-6.8%	-6.6%	-17.3%	-11.8%	
10062	-32.9%	3.8%	-4.0%	4.1%	-22.1%	-21.5%	-39.5%	-41.6%	-23.9%	
10070	212.6%	163.8%	481.2%	-32.9%	-1.8%	229.0%	77.6%	55.1%	34.5%	
10100	-24.5%	17.2%	7.6%	40.5%	42.1%	77.2%	125.2%	42.9%	21.1%	
10103	-1.2%	-9.6%	-3.7%	27.3%	18.3%	19.3%	8.1%	-5.6%	-20.3%	
10111	-5.1%	-30.7%	-13.6%	-28.4%	4.9%	-26.0%	-30.9%	-15.7%	-24.6%	
10176	77.8%	0.0%								
10184										
10213	-20.8%	-29.4%	-23.9%	-14.1%	-4.6%	-11.5%	-34.1%	-31.9%	3.1%	

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Appendix I, Exhibit IV (Ratios after data filtering)

Cocode	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
10006										
10014	-77.7%	-44.4%	-45.6%	-34.1%	-63.3%	311.3%	2.3%	4.2%	4.2%	
10017	-40.1%	-50.9%	-11.0%	15.5%	17.0%	-13.6%	-27.7%	-20.5%	-12.4%	
10019										
10022	-44.6%	-44.4%	-44.5%	-38.7%	-26.5%	-10.0%	-1.7%	3.2%	-3.6%	
10025	-33.3%	-18.3%	88.4%	1.6%	-17.6%	-46.4%	9.8%	48.2%	-15.1%	
10030										
10043	23.1%	11.0%	6.8%	52.0%	66.3%	73.2%	1.3%	-9.3%	19.4%	
10046	-0.4%	-5.3%	1.2%	4.3%	14.6%	33.0%	12.3%	9.0%	6.3%	
10052	-6.6%	-14.9%	0.3%	-1.3%	25.3%	34.8%	10.0%	-10.7%	-8.6%	
10054										
10060	-5.9%	-7.8%	-7.9%	-8.4%	2.7%	-6.8%	-6.6%	-17.3%	-11.8%	
10062										
10070										
10100										
10103										
10111	-5.1%	-30.7%	-13.6%	-28.4%	4.9%	-26.0%	-30.9%	-15.7%	-24.6%	
10176										
10184										
10213	-20.8%	-29.4%	-23.9%	-14.1%	-4.6%	-11.5%	-34.1%	-31.9%	3.1%	

Appendix I, Exhibit V (Summary of Reserve Runoff Ratios)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	Worst
Homeowners/Farmowners										
Underwriting Risk - Reserves										
Simple Average	-8.3%	-12.3%	-5.5%	-3.1%	3.5%	1.8%	-6.3%	-10.5%	-6.8%	3.5%
Max	194.9%	228.4%	400.0%	400.0%	310.2%	311.3%	328.2%	105.6%	156.3%	400.0%
Min	-80.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-80.0%
Number of Companies	410	410	410	410	410	410	410	410	409	

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Example of Premium RBC Charge Calculation:

Exhibit VI shows a sample of net loss and LAE ratios by accident year for the homeowners line as of 12/31/2005. Exhibit VII shows the corresponding net earned premium for those companies by accident year. The next step was to eliminate ratios that were equal to or less than zero and companies with less than ten years' worth of data (Exhibit VIII). At this point, after filtering, of the 1,155 companies whose data was provided, 703 companies' data remains.

The last filter eliminates companies with low and/or fluctuating premium volume, defined as any of the ten accident years for a company having earned premium of less than 20% of its ten-year average earned premium (Exhibit IX) or having a ten-year average earned premium of less than \$500,000. At this point, only 607 companies remain. Once the data has been filtered, simple averages are calculated.

A summary of the simple average and other averages is in Exhibit X. A loss and LAE ratio of 89.9% would initially be selected as a worst case average. (This is the main difference from the revised methodology, in which a percentile of all observations was used.)

Appendix I, Exhibit VI (Loss & LAE Ratios)

Cocode	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
10006	63.3%	75.9%	77.6%	63.9%	0.7%	8.6%	200.0%			
10014	46.6%	34.6%	32.7%	30.2%	17.0%	75.1%	67.7%	64.4%	59.1%	67.9%
10015								15.7%	28.3%	67.4%
10017	100.8%	62.7%	61.9%	55.9%	71.3%	68.9%	45.3%	69.1%	56.6%	66.2%
10019	43.4%	48.0%	45.4%	37.6%	48.0%					
10022	85.2%	64.6%	69.0%	68.6%	69.7%	79.1%	72.3%	69.2%	54.0%	49.6%
10024			62.5%	56.1%	44.2%	73.0%	81.1%	95.1%	283.3%	
10025	81.5%	64.5%	75.1%	60.0%	66.5%	51.5%	75.9%	117.4%	102.1%	51.4%
10030	87.9%	66.7%	96.8%	75.7%	63.7%	73.8%	61.4%	73.3%	54.7%	85.2%
10043	61.1%	61.5%	66.7%	67.5%	104.9%	139.1%	99.2%	49.0%	44.8%	64.9%
10046	99.9%	67.0%	71.9%	73.0%	73.5%	79.1%	65.7%	65.4%	76.8%	54.6%
10048						60.1%	46.0%	45.0%	130.2%	134.4%
10052	69.5%	51.3%	58.0%	61.6%	73.3%	85.6%	63.7%	65.1%	66.4%	55.1%
10054	82.8%	86.8%	486.6%	-1571.4%						
10060	99.6%	65.1%	66.3%	82.7%	86.5%	76.7%	62.5%	74.3%	58.3%	60.9%
10061										300.0%
10062	82.2%	47.6%	72.5%	77.3%	72.8%	67.8%	53.5%	52.2%	62.5%	70.5%
10068										300.0%
10070	59.7%	47.8%	139.1%		43.9%					

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Appendix I, Exhibit VII (Net Earned Premium by Accident Year)

Cocode	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Avg NEP
10006	17717	15427	18466	8608	2235	70	5				8,933
10014	890	897	878	865	864	874	901	1001	937	1215	932
10015								102	272	426	267
10017	969	1154	1294	1480	1596	1736	1721	1904	2080	2367	1,630
10019	624	875	604	513	177						559
10022	9757	11186	11579	11924	12538	12800	12865	14169	15119	17049	12,899
10024			16	98	156	148	265	324	6		145
10025	346	293	454	480	454	522	531	596	664	988	533
10030	182	189	62	70	91	103	88	86	86	81	104
10043	3662	9133	13954	17866	19626	22976	33095	8617	7254	6268	14,245
10046	7138	7437	7724	8278	8944	9268	10286	11594	12953	13897	9,752
10048						529	867	1877	2537	4117	1,985
10052	1539	1687	1857	2047	3827	4281	5046	5974	6731	7260	4,025
10054	4443	3785	662	-14							2,219
10060	941	1023	1091	1077	1077	1039	973	931	887	834	987
10061										1	1
10062	912	2633	3641	4543	5232	7049	7721	7901	7758	8198	5,559
10068										1	1
10070	2823	2121	3746		57						2,187

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Appendix I, Exhibit VIII

Loss and LAE Ratios										
Eliminates Companies without a full 10 Years or with 0% Net Loss Ratios										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
10006										
10014	46.6%	34.6%	32.7%	30.2%	17.0%	75.1%	67.7%	64.4%	59.1%	67.9%
10015										
10017	100.8%	62.7%	61.9%	55.9%	71.3%	68.9%	45.3%	69.1%	56.6%	66.2%
10019										
10022	85.2%	64.6%	69.0%	68.6%	69.7%	79.1%	72.3%	69.2%	54.0%	49.6%
10024										
10025	81.5%	64.5%	75.1%	60.0%	66.5%	51.5%	75.9%	117.4%	102.1%	51.4%
10030	87.9%	66.7%	96.8%	75.7%	63.7%	73.8%	61.4%	73.3%	54.7%	85.2%
10043	61.1%	61.5%	66.7%	67.5%	104.9%	139.1%	99.2%	49.0%	44.8%	64.9%
10046	99.9%	67.0%	71.9%	73.0%	73.5%	79.1%	65.7%	65.4%	76.8%	54.6%
10048										
10052	69.5%	51.3%	58.0%	61.6%	73.3%	85.6%	63.7%	65.1%	66.4%	55.1%
10054										
10060	99.6%	65.1%	66.3%	82.7%	86.5%	76.7%	62.5%	74.3%	58.3%	60.9%
10061										
10062	82.2%	47.6%	72.5%	77.3%	72.8%	67.8%	53.5%	52.2%	62.5%	70.5%
10068										
10070										

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Appendix I, Exhibit IX (Eliminates companies with low or fluctuating premium volume)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
10006										
10014	46.6%	34.6%	32.7%	30.2%	17.0%	75.1%	67.7%	64.4%	59.1%	67.9%
10015										
10017	100.8%	62.7%	61.9%	55.9%	71.3%	68.9%	45.3%	69.1%	56.6%	66.2%
10019										
10022	85.2%	64.6%	69.0%	68.6%	69.7%	79.1%	72.3%	69.2%	54.0%	49.6%
10024										
10025	81.5%	64.5%	75.1%	60.0%	66.5%	51.5%	75.9%	117.4%	102.1%	51.4%
10030										
10043	61.1%	61.5%	66.7%	67.5%	104.9%	139.1%	99.2%	49.0%	44.8%	64.9%
10046	99.9%	67.0%	71.9%	73.0%	73.5%	79.1%	65.7%	65.4%	76.8%	54.6%
10048										
10052	69.5%	51.3%	58.0%	61.6%	73.3%	85.6%	63.7%	65.1%	66.4%	55.1%
10054										
10060	99.6%	65.1%	66.3%	82.7%	86.5%	76.7%	62.5%	74.3%	58.3%	60.9%
10061										
10062	82.2%	47.6%	72.5%	77.3%	72.8%	67.8%	53.5%	52.2%	62.5%	70.5%
10068										
10070										

Appendix I, Exhibit X (Summary of Premium Loss and Loss Expense Ratios)

Homeowners	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Worst
Underwriting Risk - Pricing											
Simple Average	89.9%	69.2%	78.5%	73.2%	78.5%	81.9%	73.8%	71.3%	67.9%	69.3%	89.9%
Max	300.0%	200.0%	300.0%	251.0%	191.1%	174.9%	164.4%	234.2%	300.0%	300.0%	300.0%
Min	13.8%	6.2%	19.3%	10.6%	17.0%	16.1%	10.2%	11.8%	20.1%	2.5%	20.1%
# of Companies	607	607	607	607	607	607	607	607	607	607	

RBC Factors Using Original Methodology
Impact of Indicated Changes Given No IIO Change
And No Capping or Minimums

Note -100% means a Negative Capital Charge is Indicated

		Pricing				Reserving			
		Indicated Loss and LAE Ratio	Current Loss and LAE Ratio	Current IIO	Resulting Change in RBC Charge	Indicated Runoff Ratio	Current Runoff Ratio	Current IIO	Resulting Change in RBC Charge
A	Homeowners	0.899	0.917	0.942	-14%	0.035	0.275	0.928	-100%
B	Personal Auto	0.888	1.046	0.924	-66%	0.018	0.254	0.921	-100%
C	Commercial Auto	0.903	1.013	0.900	-59%	0.063	0.287	0.905	-100%
D	Workers Comp	0.967	1.008	0.836	-35%	0.140	0.273	0.872	-100%
E	Comm Multi-Peril	0.800	0.917	0.884	-100%	0.196	0.374	0.880	-75%
F1	Med Mal-Occ	1.449	1.761	0.719	-43%	0.008	0.709	0.788	-100%
F2	Med Mal-CM	1.295	1.072	0.800	158%	0.111	0.346	0.829	-100%
G	Special Liability	0.825	0.917	0.913	-91%	0.101	0.244	0.887	-100%
H	Other Liability (H1 & H2)	0.834	1.082	0.808	-100%	0.181	0.520	0.832	-100%
I	Special Property	0.642	1.014	0.949	-100%	0.032	0.160	0.956	-100%
J	Auto Phys Damage	0.768	0.853	0.968	-100%	-	0.160	0.970	-100%
K	Fidelity/Surety	0.759	0.875	0.913	-100%	0.049	0.269	0.942	-100%
L	Other	0.674	0.867	0.952	-100%	0.067	0.160	0.954	-83%
M	International	n/a				n/a			
N&P	Reins Property & Financial	1.541	1.224	0.879	84%	0.506	0.313	0.864	124%
O	Reins Liability	1.655	1.379	0.762	69%	0.566	0.838	0.733	-57%
R	Products Liability (R1 & R2)	1.109	1.095	0.808	8%	0.819	0.532	0.832	87%
S	Financial & Mortgage	n/a				n/a			
Assumed Underwriting Expense Ratio				25.5%					

Note that no indications were calculated for Lines M and S because very few companies reported data in these lines.

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Appendix 2

Exhibit I

Risk Based Capital Subgroup on Pricing & Reserving Charges
Summary of Results - AFTER Capping and Minimums -Revised Methodology

(for example purposes only)

Line	Line Letter	New Values (After minimums and capping)				Current Values				Change in Charge weighted by Industry Premiums/Reserves Impact		
		Reserving Runoff Ratio	Reserving IIO	Loss and LAE Ratio	Premium IIO	Reserving Runoff Ratio	Reserving IIO	Loss and LAE Ratio	Premium IIO	Impact from Reserving	Impact from Premium	Combined Change
(1) H/F	A	0.191	0.939	0.952	0.951	0.275	0.928	0.917	0.942	-35.0%	35.0%	9.9%
(2) PPA	B	0.187	0.927	0.965	0.921	0.254	0.921	1.046	0.924	-35.0%	-35.0%	-35.0%
(3) CA	C	0.238	0.909	1.005	0.883	0.287	0.905	1.013	0.900	-24.1%	-15.0%	-20.1%
(4) WC	D	0.283	0.835	1.053	0.832	0.273	0.872	1.008	0.836	-35.0%	33.9%	-17.7%
(5) CMP	E	0.439	0.884	0.935	0.888	0.374	0.880	0.917	0.884	30.3%	30.2%	30.3%
(6) MM Occurrence	F1	0.410	0.869	1.861	0.778	0.709	0.788	1.761	0.719	-35.0%	35.0%	-19.0%
(7) MM CM	F2	0.283	0.893	1.074	0.835	0.346	0.829	1.072	0.800	25.7%	35.0%	28.5%
(8) SL	G	0.249	0.901	0.910	0.897	0.244	0.887	0.917	0.913	20.3%	-22.7%	0.1%
(9) OL	H	0.478	0.862	1.045	0.820	0.520	0.832	1.082	0.808	3.6%	-12.9%	1.1%
(11) Spec Prop	I	0.188	0.966	0.939	0.944	0.160	0.956	1.014	0.949	35.0%	-35.0%	-19.0%
(12) Auto Phys Damage	J	0.109	0.975	0.847	0.972	0.160	0.970	0.853	0.968	-35.0%	-3.8%	-7.3%
(10) Fidelity & Surety	K	0.321	0.957	0.863	0.921	0.269	0.942	0.875	0.913	35.0%	-7.2%	25.0%
(13) Other	L	0.186	0.964	0.893	0.956	0.160	0.954	0.867	0.952	35.0%	35.0%	35.0%
(15) International	M	0.327	0.877	1.169	0.901	0.327	0.864	1.169	0.879	12.1%	9.1%	10.9%
(16) Rein Property & Financial	N&P	0.311	0.901	1.347	0.884	0.313	0.864	1.224	0.879	35.0%	35.0%	35.0%
(17) Reinsurance Liab	O	0.761	0.834	1.429	0.810	0.838	0.733	1.379	0.762	35.0%	35.0%	35.0%
(18) Products Liability	R	0.636	0.838	1.199	0.778	0.532	0.832	1.095	0.808	35.0%	35.0%	35.0%
(14) Fin & Mort	S	0.160	0.962	1.400	0.916	0.160	0.942	1.400	0.913	25.4%	0.8%	0.8%
Reserve/Premium Weighted Change										-0.2%	-6.5%	-3.1%

Underwriting Expense Ratio
25.5%

HO/PPA/APD
CMP/WC/CA/OL/SP/PL
Reinsurance
Medical Malpractice
Overall

Percentage change in estimated impact using industry factors alone

Reserve	Premium	Total
-35.0%	-15.9%	-22.5%
-0.8%	-3.5%	-1.5%
35.0%	35.0%	35.0%
-14.9%	35.0%	-2.2%
-0.9%	-6.5%	-3.1%

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Appendix 2

Risk Based Capital Subgroup on Pricing & Reserving Charges

Exhibit II

Summary of Results - BEFORE Capping and Minimums - Revised Methodology

(for example purposes only)

Line	Line Letter	New Values (before minimums and capping)				Current Values				Impact from Reserving	Impact from Premium
		Reserving RBC charge	Reserving IIO	Premium RBC Charge	Premium IIO	Reserving RBC charge	Reserving IIO	Premium RBC Charge	Premium IIO		
(1) H/F	A	0.177	0.939	0.963	0.951	0.275	0.928	0.917	0.942	-42.3%	43.5%
(2) PPA	B	0.128	0.927	0.946	0.921	0.254	0.921	1.046	0.924	-70.3%	-43.1%
(3) CA	C	0.238	0.909	1.005	0.883	0.287	0.905	1.013	0.9	-24.1%	-15.0%
(4) WC	D	0.274	0.835	1.053	0.832	0.273	0.872	1.008	0.836	-42.0%	33.9%
(5) CMP	E	0.439	0.884	0.935	0.888	0.374	0.88	0.917	0.884	30.3%	30.2%
(6) MM Occurrence	F1	0.323	0.869	2.060	0.778	0.709	0.788	1.761	0.719	-56.9%	64.8%
(7) MM CM	F2	0.283	0.893	1.620	0.835	0.346	0.829	1.072	0.8	25.7%	439.8%
(8) SL	G	0.249	0.901	0.910	0.897	0.244	0.887	0.917	0.913	20.3%	-22.7%
(9) OL	H	0.478	0.862	1.045	0.820	0.520	0.832	1.082	0.808	3.6%	-12.9%
(11) Spec Prop	I	0.290	0.966	0.798	0.944	0.160	0.956	1.014	0.949	125.4%	-96.2%
(12) Auto Phys Damage	J	0.096	0.975	0.847	0.972	0.160	0.97	0.853	0.968	-45.5%	-3.8%
(10) Fidelity & Surety	K	0.427	0.957	0.856	0.921	0.269	0.942	0.875	0.913	87.1%	-19.6%
(13) Other	L	0.361	0.964	0.959	0.956	0.160	0.954	0.867	0.952	192.5%	113.9%
(15) International	M	0.327	0.877	1.169	0.901	0.327	0.864	1.169	0.879	12.1%	9.1%
(16) Rein Property & Financial	N&P	0.742	0.901	1.830	0.884	0.313	0.864	1.224	0.879	323.9%	164.0%
(17) Reinsurance Liab	O	0.849	0.834	1.552	0.810	0.838	0.733	1.379	0.762	56.1%	67.4%
(18) Products Liability	R	1.488	0.838	1.380	0.778	0.532	0.832	1.095	0.808	294.9%	135.4%
(14) Fin & Mort	S	0.160	0.962	1.400	0.916	0.160	0.942	1.400	0.913	25.4%	0.8%

Underwriting Expense Ratio

25.5%

American Academy of Actuaries
Risk Based Capital Subgroup on Pricing & Reserving Charges
Development of Capped Factors-Revised Methodology
35%
(for example purposes only)

Appendix 2

Exhibit III

Development of Proposed with Minimums and Capping

Line	Line Letter	Proposed Values - Before Capping							Current Values							Reserve Charge		Premium Charge	
		Aggregate Loss & LAE	Net Written Premium 2005	Reserve Runoff Ratio	Reserving IIO	Reserve Before Cap, with Min	Premium Loss and LAE Ratio	Premium IIO	Premium Charge Before Cap, with Min	Reserve Runoff Ratio	Reserving IIO	Reserve Charge	Premium Loss and LAE Ratio	Premium IIO	Premium Charge	Current	Indicated Capped	Current	Indicated Capped
(1) H/F	A	19,852,268	54,800,315	0.177	0.939	0.106	0.963	0.951	0.170	0.275	0.928	0.183	0.917	0.942	0.119	0.183	0.119	0.160	
(2) PPA	B	85,172,579	94,860,497	0.128	0.927	0.050	0.946	0.921	0.126	0.254	0.921	0.155	1.046	0.924	0.222	0.155	0.101	0.144	
(3) CA	C	25,944,273	19,766,966	0.238	0.909	0.125	1.005	0.883	0.142	0.287	0.905	0.165	1.013	0.900	0.167	0.165	0.125	0.142	
(4) WC	D	129,490,920	48,860,164	0.274	0.835	0.064	1.053	0.832	0.131	0.273	0.872	0.110	1.008	0.836	0.098	0.110	0.072	0.131	
(5) CMP	E	36,578,767	29,645,006	0.439	0.884	0.273	0.935	0.888	0.085	0.374	0.880	0.209	0.917	0.884	0.066	0.209	0.273	0.085	
(6) MM Occurrence	F1	11,831,384	2,332,329	0.323	0.869	0.149	2.060	0.778	0.859	0.709	0.788	0.347	1.761	0.719	0.521	0.347	0.225	0.704	
(7) MM CM	F2	17,498,277	7,782,258	0.283	0.893	0.146	1.620	0.835	0.608	0.346	0.829	0.116	1.072	0.800	0.113	0.116	0.146	0.152	
(8) SL	G	6,521,213	6,450,843	0.249	0.901	0.124	0.910	0.897	0.071	0.244	0.887	0.103	0.917	0.913	0.092	0.103	0.124	0.071	
(9) OL	H	108,313,309	39,533,685	0.478	0.862	0.274	1.045	0.820	0.113	0.520	0.832	0.265	1.082	0.808	0.129	0.265	0.274	0.113	
(11) Spec Prop	I	15,184,142	25,690,669	0.290	0.966	0.246	0.798	0.944	0.050	0.160	0.956	0.109	1.014	0.949	0.217	0.109	0.147	0.141	
(12) Auto Phys Damage	J	5,694,477	71,886,152	0.096	0.975	0.068	0.847	0.972	0.078	0.160	0.970	0.125	0.853	0.968	0.081	0.125	0.081	0.078	
(10) Fidelity & Surety	K	4,498,952	5,064,801	0.427	0.957	0.366	0.856	0.921	0.050	0.269	0.942	0.195	0.875	0.913	0.054	0.195	0.264	0.050	
(13) Other	L	5,223,907	13,452,554	0.361	0.964	0.312	0.959	0.956	0.172	0.160	0.954	0.107	0.867	0.952	0.080	0.107	0.144	0.109	
(15) International	M	635,439	230,162	0.327	0.877	0.164	1.169	0.901	0.308	0.327	0.864	0.147	1.169	0.879	0.283	0.147	0.164	0.308	
(16) Rein Property & Financial	N&P	12,020,001	4,340,816	0.742	0.901	0.570	1.830	0.884	0.874	0.313	0.864	0.134	1.224	0.879	0.331	0.134	0.181	0.447	
(17) Reinsurance Liab	O	44,160,796	3,095,066	0.849	0.834	0.542	1.552	0.810	0.512	0.838	0.733	0.347	1.379	0.762	0.306	0.347	0.469	0.413	
(18) Products Liability	R	16,625,011	3,521,836	1.488	0.838	1.085	1.380	0.778	0.329	0.532	0.832	0.275	1.095	0.808	0.140	0.275	0.371	0.189	
(14) Fin & Mort	S	27,816	7,435,150	0.160	0.962	0.116	1.400	0.916	0.537	0.160	0.942	0.093	1.400	0.913	0.533	0.093	0.116	0.533	
		545,273,531	438,749,267																
Selections:																			
Percentile Selected	87.5%					Minimum Charge Applie	0.050			0.050									
Industry Underwriting Expense OUE	25.5%																		

American Academy of Actuaries
Risk Based Capital Subgroup on Pricing & Reserving Charges
Estimated Impact Capped at
35%
(for example purposes only)

Appendix 2
Revised Methodology

Exhibit IV

Analysis of Impacts of the Factor Updates

Line	Impact from Reserving	Impact from Premium	Hit Cap?		Impact Weighted on Industry Reserves and Premiums								
			Reserve Factor	Premium Factor	Reserve (\$)	Premium (\$)	Change (\$)		Percent Total Change				
					Charge Before	Capped Charge	Charge Before	Capped Charge	Reserve	Premium	Total	Percent Total Change	
(1) H/F	-35.0%	35.0%	1	1	3,636,935	2,364,008	6,511,045	8,789,910	-1,272,927	2,278,866	1,005,938	9.9%	
(2) PPA	-35.0%	-35.0%	1	1	13,196,128	8,577,483	21,011,980	13,657,787	-4,618,645	-7,354,193	-11,972,838	-35.0%	
(3) CA	-24.1%	-15.0%	0	0	4,273,930	3,244,142	3,295,153	2,801,812	-1,029,788	-493,341	-1,523,129	-20.1%	
(4) WC	-35.0%	33.9%	1	0	14,251,253	9,263,314	4,773,052	6,389,406	-4,987,938	1,616,355	-3,371,584	-17.7%	
(5) CMP	30.3%	30.2%	0	0	7,649,352	9,970,380	1,945,542	2,532,466	2,321,028	586,923	2,907,951	30.3%	
(6) MM Occurrence	-35.0%	35.0%	1	1	4,101,846	2,666,200	1,215,514	1,640,944	-1,435,646	425,430	-1,010,216	-19.0%	
(7) MM CM	25.7%	35.0%	0	1	2,026,895	2,548,619	876,282	1,182,981	521,724	306,699	828,423	28.5%	
(8) SL	20.3%	-22.7%	0	0	674,476	811,573	594,903	459,647	137,097	-135,256	1,841	0.1%	
(9) OL	3.6%	-12.9%	0	0	28,664,034	29,686,311	5,109,966	4,449,541	1,022,277	-660,425	361,852	1.1%	
(11) Spec Prop	35.0%	-35.0%	1	1	1,654,464	2,233,527	5,582,223	3,628,445	579,062	-1,953,778	-1,374,716	-19.0%	
(12) Auto Phys Damage	-35.0%	-3.8%	1	0	712,949	463,417	5,801,500	5,578,174	-249,532	-223,326	-472,858	-7.3%	
(10) Fidelity & Surety	35.0%	-7.2%	1	0	879,086	1,186,766	272,866	253,240	307,680	-19,626	288,054	25.0%	
(13) Other	35.0%	35.0%	1	1	557,077	752,055	1,081,370	1,459,850	194,977	378,480	573,457	35.0%	
(15) International	12.1%	9.1%	0	0	93,110	104,346	65,033	70,966	11,237	5,933	17,170	10.9%	
(16) Rein Property & Financial	35.0%	35.0%	1	1	1,615,873	2,181,428	1,436,359	1,939,084	565,555	502,726	1,068,281	35.0%	
(17) Reinsurance Liab	35.0%	35.0%	1	1	15,335,013	20,702,268	946,465	1,277,728	5,367,255	331,263	5,698,517	35.0%	
(18) Products Liability	35.0%	35.0%	1	1	4,565,627	6,163,596	492,212	664,486	1,597,969	172,274	1,770,244	35.0%	
(14) Fin & Mort	25.4%	0.8%	0	0	2,579	3,233	3,964,422	3,996,364	654	31,942	32,596	0.8%	
Percentage of Reserve/Premium Capped			64%	48%									
Number Capped	11	9		20	Totals	103,890,628	102,922,666	64,975,886	60,772,830	-967,961	-4,203,056	-5,171,017	-3.1%
Proportion of Lines Capped	61%	50%		56%									

American Academy of Actuaries
Risk Based Capital Subgroup on Pricing & Reserving Charges
Investment Income Offset Selection Page

Appendix 3
 Summary

Select Number corresponding to the desired IIO calculation

1 Selected New 2005 Data	1 New 2005 Data	2 Current Factors	3 2002 Analysis
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Line	Line Letter	Reserving IIO	Premium IIO	Reserving IIO	Premium IIO	Reserving IIO	Premium IIO	Reserving IIO	Premium IIO
(1) H/F	A	0.939	0.951	0.939	0.951	0.928	0.942	0.943	0.927
(2) PPA	B	0.927	0.921	0.927	0.921	0.921	0.924	0.926	0.898
(3) CA	C	0.909	0.883	0.909	0.883	0.905	0.900	0.914	0.869
(4) WC	D	0.835	0.832	0.835	0.832	0.872	0.836	0.824	0.814
(5) CMP	E	0.884	0.888	0.884	0.888	0.880	0.884	0.870	0.871
(6) MM Occurrence	F1	0.869	0.778	0.869	0.778	0.788	0.719	0.842	0.753
(7) MM CM	F2	0.893	0.835	0.893	0.835	0.829	0.800	0.889	0.826
(8) SL	G	0.901	0.897	0.901	0.897	0.887	0.913	0.892	0.877
(9) OL	H	0.862	0.820	0.862	0.820	0.832	0.808	0.868	0.819
(11) Spec Prop	I	0.966	0.944	0.966	0.944	0.956	0.949	0.954	0.881
(12) Auto Phys Damage	J	0.975	0.972	0.975	0.972	0.970	0.968	0.955	0.950
(10) Fidelity & Surety	K	0.957	0.921	0.957	0.921	0.942	0.913	0.929	0.912
(13) Other	L	0.964	0.956	0.964	0.956	0.954	0.952	0.830	0.938
(15) International	M	0.877	0.901	0.877	0.901	0.864	0.879	0.876	0.866
(16) Rein Property & Financial	N&P	0.901	0.884	0.901	0.884	0.864	0.879	0.879	0.850
(17) Reinsurance Liab	O	0.834	0.810	0.834	0.810	0.733	0.762	0.840	0.762
(18) Products Liability	R	0.838	0.778	0.838	0.778	0.832	0.808	0.844	0.840
(14) Fin & Mort	S	0.962	0.916	0.962	0.916	0.942	0.913	0.942	0.913
Weighted Average		0.878	0.907	0.878	0.907	0.865	0.905	0.873	0.887

**Calculation of Investment Income Offset
Homeowners/Farmowners
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144				0.04%	11.5	57.1%		
1995	132				0.15%	10.5	59.9%	97.6%	
1996	120	21,022,414	20,981,878	99.81%	0.15%	9.5	62.9%	96.6%	40,536
1997	108	16,429,686	16,373,345	99.66%	0.04%	8.5	66.1%	94.4%	56,341
1998	96	20,519,283	20,440,270	99.61%	0.06%	7.5	69.4%	90.8%	79,013
1999	84	21,088,294	20,993,962	99.55%	0.50%	6.5	72.8%	88.0%	94,332
2000	72	25,109,903	24,870,890	99.05%	0.56%	5.5	76.5%	91.1%	239,013
2001	60	28,890,211	28,454,848	98.49%	1.34%	4.5	80.3%	90.8%	435,363
2002	48	25,612,860	24,884,734	97.16%	2.06%	3.5	84.3%	91.7%	728,126
2003	36	26,988,121	25,666,280	95.10%	4.41%	2.5	88.5%	91.6%	1,321,841
2004	24	29,283,859	26,557,156	90.69%	25.66%	1.5	92.9%	92.2%	2,726,703
2005	12	33,501,988	21,786,523	65.03%	65.03%	0.5	97.6%	95.0%	11,715,465
					100.00%				17,436,733

Risk Free

Rate: 5%

	<u>Calculated</u>
Premium IIO:	95.1%
Reserve IIO:	93.9%

Calculations:

Cumulative paid is the ratio of total paid to total incurred at each age.

Incremental paid is simply the differencing of the cumulative paid by age. Tail extension is judgmental but based on tax discounting methodology.

Shaded values have been adjusted judgmentally to derive a smooth pattern.

Discount factor is based on the time lag and the risk free rate.

Reserve Discount factor is the present value of the reserves remaining at the age at left based on the remaining incremental payment pattern.

The Premium IIO is the incremental accident year payout pattern discounted to it's value at inception.

The Reserve IIO is the weighted average reserve discount factor based on industry outstanding reserves in the right hand column.

**Calculation of Investment Income Offset
Private Passenger Auto Liability
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156				0.10%	12.5	54.3%		
1994	144				0.14%	11.5	57.1%	97.6%	
1995	132				0.14%	10.5	59.9%	95.6%	
1996	120	46,709,645	46,535,457	99.63%	0.14%	9.5	62.9%	93.4%	174,188
1997	108	46,996,791	46,757,636	99.49%	0.24%	8.5	66.1%	91.3%	239,155
1998	96	48,088,466	47,729,173	99.25%	0.54%	7.5	69.4%	90.3%	359,293
1999	84	51,557,889	50,892,975	98.71%	0.89%	6.5	72.8%	90.9%	664,914
2000	72	55,151,298	53,948,674	97.82%	1.80%	5.5	76.5%	91.1%	1,202,624
2001	60	56,812,007	54,552,545	96.02%	4.20%	4.5	80.3%	91.6%	2,259,462
2002	48	59,459,053	54,598,727	91.83%	8.30%	3.5	84.3%	92.6%	4,860,326
2003	36	58,937,260	49,225,644	83.52%	14.15%	2.5	88.5%	92.9%	9,711,616
2004	24	59,916,108	41,567,535	69.38%	29.57%	1.5	92.9%	92.7%	18,348,573
2005	12	63,079,168	25,108,545	39.80%	39.80%	0.5	97.6%	92.9%	37,970,623
					100.00%				75,790,774

Risk Free Rate: 5%

	<u>Calculated</u>
Premium IIO:	92.1%
Reserve IIO:	92.7%

**Calculation of Investment Income Offset
Commercial Auto Liability
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180				0.12%	14.5	49.3%		
1992	168				0.23%	13.5	51.8%	97.6%	
1993	156				0.23%	12.5	54.3%	96.1%	
1994	144				0.23%	11.5	57.1%	93.9%	
1995	132				0.23%	10.5	59.9%	91.8%	
1996	120	9,604,181	9,503,261	98.95%	0.23%	9.5	62.9%	89.7%	100,920
1997	108	10,090,071	9,960,446	98.72%	0.86%	8.5	66.1%	87.6%	129,625
1998	96	10,385,375	10,162,882	97.86%	1.11%	7.5	69.4%	89.1%	222,493
1999	84	11,103,377	10,742,658	96.75%	2.30%	6.5	72.8%	89.2%	360,719
2000	72	11,369,548	10,738,120	94.45%	4.92%	5.5	76.5%	90.2%	631,428
2001	60	11,066,879	9,907,767	89.53%	9.07%	4.5	80.3%	91.4%	1,159,112
2002	48	10,629,116	8,551,587	80.45%	15.76%	3.5	84.3%	91.9%	2,077,529
2003	36	10,780,898	6,974,531	64.69%	20.26%	2.5	88.5%	92.0%	3,806,367
2004	24	11,063,182	4,915,382	44.43%	23.88%	1.5	92.9%	91.3%	6,147,800
2005	12	11,768,355	2,418,524	20.55%	20.55%	0.5	97.6%	90.1%	9,349,831
					100.00%				23,985,824

Risk Free
Rate: 5%

	<u>Calculated</u>
Premium IIO:	88.3%
Reserve IIO:	90.9%

**Calculation of Investment Income Offset
Workers' Compensation
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180				2.41%	14.5	49.3%		
1992	168				2.41%	13.5	51.8%	97.6%	
1993	156				2.41%	12.5	54.3%	95.3%	
1994	144				2.41%	11.5	57.1%	93.0%	
1995	132				2.41%	10.5	59.9%	90.8%	
1996	120	20,446,435	17,314,617	84.68%	2.41%	9.5	62.9%	88.7%	3,131,818
1997	108	21,683,904	18,109,217	83.51%	2.41%	8.5	66.1%	86.7%	3,574,687
1998	96	23,366,589	19,233,008	82.31%	2.41%	7.5	69.4%	84.7%	4,133,581
1999	84	23,435,093	18,797,552	80.21%	2.41%	6.5	72.8%	82.8%	4,637,541
2000	72	25,152,143	19,704,635	78.34%	4.20%	5.5	76.5%	80.9%	5,447,508
2001	60	26,735,909	19,822,819	74.14%	8.40%	4.5	80.3%	80.4%	6,913,090
2002	48	27,290,608	17,942,541	65.75%	11.15%	3.5	84.3%	81.7%	9,348,067
2003	36	28,153,317	15,371,108	54.60%	17.48%	2.5	88.5%	82.7%	12,782,209
2004	24	30,770,935	11,421,320	37.12%	20.76%	1.5	92.9%	84.0%	19,349,615
2005	12	33,344,659	5,455,631	16.36%	16.36%	0.5	97.6%	84.4%	27,889,028
					100.00%				97,207,144

Risk Free
Rate: 5%

	<u>Calculated</u>
Premium IIO:	83.2%
Reserve IIO:	83.5%

**Calculation of Investment Income Offset
Commercial Multiple Peril
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156				0.77%	12.5	54.3%		
1994	144				1.18%	11.5	57.1%	97.6%	
1995	132				1.18%	10.5	59.9%	95.7%	
1996	120	13,807,071	13,375,459	96.87%	1.18%	9.5	62.9%	93.6%	431,612
1997	108	12,803,720	12,252,763	95.70%	1.07%	8.5	66.1%	91.5%	550,957
1998	96	14,654,740	13,867,325	94.63%	1.83%	7.5	69.4%	89.2%	787,415
1999	84	15,002,554	13,922,114	92.80%	2.79%	6.5	72.8%	88.2%	1,080,440
2000	72	15,239,940	13,717,782	90.01%	2.91%	5.5	76.5%	87.8%	1,522,158
2001	60	15,719,359	13,691,199	87.10%	8.88%	4.5	80.3%	86.7%	2,028,160
2002	48	13,739,401	10,746,918	78.22%	10.30%	3.5	84.3%	88.7%	2,992,483
2003	36	13,753,672	9,341,262	67.92%	8.45%	2.5	88.5%	88.7%	4,412,410
2004	24	15,749,375	9,366,128	59.47%	27.56%	1.5	92.9%	87.2%	6,383,247
2005	12	17,728,158	5,657,168	31.91%	31.91%	0.5	97.6%	88.9%	12,070,990
					100.00%				32,259,872

Risk Free
Rate: 5%

	<u>Calculated</u>
Premium IIO:	88.8%
Reserve IIO:	88.4%

**Calculation of Investment Income Offset
Medical Malpractice - Occurrence
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144				1.38%	11.5	57.1%		
1995	132				4.34%	10.5	59.9%	97.6%	
1996	120	1,605,518	1,441,940	94.28%	4.34%	9.5	62.9%	96.5%	163,578
1997	108	1,716,061	1,543,302	89.93%	4.34%	8.5	66.1%	94.3%	172,759
1998	96	1,918,509	1,642,017	85.59%	6.37%	7.5	69.4%	92.2%	276,492
1999	84	2,065,005	1,635,857	79.22%	11.26%	6.5	72.8%	90.8%	429,148
2000	72	2,007,165	1,364,000	67.96%	15.83%	5.5	76.5%	90.4%	643,165
2001	60	2,127,900	1,109,206	52.13%	17.50%	4.5	80.3%	89.9%	1,018,694
2002	48	2,384,714	825,667	34.62%	17.96%	3.5	84.3%	88.8%	1,559,047
2003	36	2,633,784	438,911	16.66%	13.21%	2.5	88.5%	87.4%	2,194,873
2004	24	2,155,006	74,510	3.46%	2.68%	1.5	92.9%	85.2%	2,080,496
2005	12	2,236,725	17,303	0.77%	0.77%	0.5	97.6%	81.6%	2,219,422
						100.00%			10,757,674

Risk Free
Rate: 5%

	<u>Calculated</u>
Premium IIO:	77.8%
Reserve IIO:	86.9%

**Calculation of Investment Income Offset
Medical Malpractice - Claims Made
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144				0.52%	11.5	57.1%		
1995	132				1.91%	10.5	59.9%	97.6%	
1996	120	3,291,550	3,211,716	97.57%	1.91%	9.5	62.9%	96.6%	79,834
1997	108	3,760,597	3,597,670	95.67%	2.74%	8.5	66.1%	94.5%	162,927
1998	96	4,242,955	3,942,837	92.93%	1.93%	7.5	69.4%	92.9%	300,118
1999	84	4,170,175	3,794,908	91.00%	5.73%	6.5	72.8%	90.4%	375,267
2000	72	4,293,968	3,661,659	85.27%	5.58%	5.5	76.5%	90.6%	632,309
2001	60	4,907,984	3,911,623	79.70%	15.98%	4.5	80.3%	89.4%	996,361
2002	48	5,005,621	3,189,346	63.72%	20.98%	3.5	84.3%	90.6%	1,816,275
2003	36	4,590,282	1,961,633	42.73%	24.88%	2.5	88.5%	90.4%	2,628,649
2004	24	4,775,708	852,692	17.85%	14.90%	1.5	92.9%	89.6%	3,923,016
2005	12	5,245,650	154,901	2.95%	2.95%	0.5	97.6%	87.2%	5,090,749
					100.00%				16,005,505

Risk Free Rate: 5%

	<u>Calculated</u>
Premium IIO:	83.5%
Reserve IIO:	89.3%

**Calculation of Investment Income Offset
Special Liability
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168				0.04%	13.5	51.8%		
1993	156				0.71%	12.5	54.3%	97.6%	
1994	144				0.71%	11.5	57.1%	97.3%	
1995	132				0.71%	10.5	59.9%	95.1%	
1996	120	2,103,837	2,057,845	97.81%	0.71%	9.5	62.9%	92.9%	45,992
1997	108	2,298,293	2,231,621	97.10%	0.45%	8.5	66.1%	90.7%	66,672
1998	96	2,438,842	2,357,066	96.65%	1.51%	7.5	69.4%	87.9%	81,776
1999	84	2,461,915	2,342,086	95.13%	2.19%	6.5	72.8%	88.0%	119,829
2000	72	2,525,890	2,347,745	92.95%	4.45%	5.5	76.5%	88.1%	178,145
2001	60	2,726,378	2,135,798	88.50%	4.45%	4.5	80.3%	89.2%	590,580
2002	48	2,251,380	1,892,426	84.06%	8.49%	3.5	84.3%	88.5%	358,954
2003	36	2,529,352	1,911,453	75.57%	10.75%	2.5	88.5%	88.9%	617,899
2004	24	3,034,065	1,966,655	64.82%	39.70%	1.5	92.9%	88.6%	1,067,410
2005	12	4,002,852	1,005,401	25.12%	25.12%	0.5	97.6%	91.4%	2,997,451
					100.00%				6,124,708

Risk Free
Rate: 5%

	<u>Calculated</u>
Premium IIO:	89.7%
Reserve IIO:	90.1%

**Calculation of Investment Income Offset
Other Liability
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168				1.51%	13.5	51.8%		
1993	156				2.11%	12.5	54.3%	97.6%	
1994	144				2.11%	11.5	57.1%	95.7%	
1995	132				2.11%	10.5	59.9%	93.5%	
1996	120	12,368,550	11,399,243	92.16%	2.11%	9.5	62.9%	91.3%	969,307
1997	108	14,354,272	12,926,537	90.05%	2.45%	8.5	66.1%	89.2%	1,427,735
1998	96	17,784,237	15,087,975	87.60%	2.45%	7.5	69.4%	87.5%	2,696,262
1999	84	17,675,063	15,049,929	85.15%	6.46%	6.5	72.8%	85.7%	2,625,134
2000	72	18,677,397	14,697,111	78.69%	8.67%	5.5	76.5%	86.4%	3,980,286
2001	60	19,945,487	13,964,773	70.01%	10.84%	4.5	80.3%	86.7%	5,980,714
2002	48	21,674,119	12,824,526	59.17%	18.83%	3.5	84.3%	86.6%	8,849,593
2003	36	21,949,749	8,853,792	40.34%	19.32%	2.5	88.5%	87.2%	13,095,957
2004	24	23,433,887	4,924,625	21.01%	11.78%	1.5	92.9%	86.6%	18,509,262
2005	12	26,052,254	2,405,783	9.23%	9.23%	0.5	97.6%	84.5%	23,646,471
					100.00%				81,780,721

Risk Free Rate: 5%

	Calculated
Premium IIO:	82.0%
Reserve IIO:	86.2%

Occurrence		Claims Made	
Total Incurred	Total Paid	Total Incurred	Total Paid
9,172,431	8,326,083	3,196,119	3,073,160
10,628,257	9,396,723	3,726,015	3,529,814
12,712,949	10,499,567	5,071,288	4,588,408
11,961,729	10,002,116	5,713,334	5,047,813
11,801,620	9,080,290	6,875,777	5,616,821
12,613,040	8,616,494	7,332,447	5,348,279
13,153,755	7,552,969	8,520,364	5,271,557
14,150,289	5,692,911	7,799,460	3,160,881
15,091,572	3,463,087	8,342,315	1,461,538
16,216,418	1,968,632	9,835,836	437,151

**Calculation of Investment Income Offset
Special Property
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144					11.5	57.1%		
1995	132					10.5	59.9%		
1996	120					9.5	62.9%		0
1997	108					8.5	66.1%		0
1998	96					7.5	69.4%		0
1999	84					6.5	72.8%		0
2000	72					5.5	76.5%		0
2001	60					4.5	80.3%		0
2002	48					3.5	84.3%		0
2003	36				13.98%	2.5	88.5%		0
2004	24	13,067,753	11,241,034	86.02%	41.33%	1.5	92.9%	97.6%	1,826,719
2005	12	18,341,446	8,196,824	44.69%	44.69%	0.5	97.6%	96.4%	10,144,622
					100.00%				11,971,341

Risk Free Rate: 5%

	Calculated
Premium IIO:	94.4%
Reserve IIO:	96.6%

**Calculation of Investment Income Offset
Auto Physical Damage
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144					11.5	57.1%		
1995	132					10.5	59.9%		
1996	120					9.5	62.9%		0
1997	108					8.5	66.1%		0
1998	96					7.5	69.4%		0
1999	84					6.5	72.8%		0
2000	72					5.5	76.5%		0
2001	60					4.5	80.3%		0
2002	48					3.5	84.3%		0
2003	36				0.20%	2.5	88.5%		0
2004	24	38,059,101	37,984,885	99.80%	9.00%	1.5	92.9%	97.6%	74,216
2005	12	42,410,058	38,512,369	90.81%	90.81%	0.5	97.6%	97.5%	3,897,689
					100.00%				3,971,905

Risk Free Rate: 5%

	Calculated
Premium IIO:	97.2%
Reserve IIO:	97.5%

**Calculation of Investment Income Offset
Fidelity & Surety
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144					11.5	57.1%		
1995	132					10.5	59.9%		
1996	120					9.5	62.9%		0
1997	108					8.5	66.1%		0
1998	96					7.5	69.4%		0
1999	84					6.5	72.8%		0
2000	72					5.5	76.5%		0
2001	60					4.5	80.3%		0
2002	48				4.31%	3.5	84.3%		0
2003	36				35.97%	2.5	88.5%	97.6%	0
2004	24	2,108,985	1,259,479	59.72%	35.97%	1.5	92.9%	97.1%	849,506
2005	12	1,915,747	455,008	23.75%	23.75%	0.5	97.6%	94.9%	1,460,739
					100.00%				2,310,245

Risk Free Rate: 5%

	Calculated
Premium IIO:	92.1%
Reserve IIO:	95.7%

**Calculation of Investment Income Offset
Other
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144					11.5	57.1%		
1995	132					10.5	59.9%		
1996	120					9.5	62.9%		0
1997	108					8.5	66.1%		0
1998	96					7.5	69.4%		0
1999	84					6.5	72.8%		0
2000	72					5.5	76.5%		0
2001	60					4.5	80.3%		0
2002	48					3.5	84.3%		0
2003	36				10.98%	2.5	88.5%		0
2004	24	7,135,282	6,352,115	89.02%	21.77%	1.5	92.9%	97.6%	783,167
2005	12	7,162,523	4,817,417	67.26%	67.26%	0.5	97.6%	96.0%	2,345,106
					100.00%				3,128,273

Risk Free Rate: 5%

	Calculated
Premium IIO:	95.6%
Reserve IIO:	96.4%

**Calculation of Investment Income Offset
International
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168				0.61%	13.5	51.8%		
1993	156				0.95%	12.5	54.3%	97.6%	
1994	144				0.95%	11.5	57.1%	95.8%	
1995	132				0.95%	10.5	59.9%	93.6%	
1996	120	186,117,942	179,681,685	96.54%	0.95%	9.5	62.9%	91.5%	6,436,257
1997	108	185,218,698	177,054,230	95.59%	1.15%	8.5	66.1%	89.4%	8,164,468
1998	96	205,748,509	194,319,803	94.45%	1.02%	7.5	69.4%	87.7%	11,428,706
1999	84	217,223,073	202,952,104	93.43%	2.01%	6.5	72.8%	85.7%	14,270,969
2000	72	233,118,090	213,122,973	91.42%	2.48%	5.5	76.5%	85.4%	19,995,117
2001	60	250,597,261	222,896,681	88.95%	5.38%	4.5	80.3%	84.9%	27,700,580
2002	48	240,133,568	200,668,585	83.57%	7.94%	3.5	84.3%	86.4%	39,464,983
2003	36	240,967,882	182,223,661	75.62%	11.19%	2.5	88.5%	87.2%	58,744,221
2004	24	255,396,887	164,548,045	64.43%	22.64%	1.5	92.9%	87.7%	90,848,842
2005	12	286,778,359	119,841,675	41.79%	41.79%	0.5	97.6%	89.0%	166,936,684
					100.00%				443,990,827

Risk Free
Rate:

5%

	<u>Calculated</u>
Premium IIO:	90.1%
Reserve IIO:	87.7%

Original Int'l

284864	249936
244672	236213
390008	377949
523127	506373
137401	108879
192016	159050
232713	192322
252121	232787
408270	183270
234726	91608

**Calculation of Investment Income Offset
Property & Financial Reinsurance
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144					11.5	57.1%		
1995	132				1.74%	10.5	59.9%		
1996	120	2,044,754	2,009,153	98.26%	3.08%	9.5	62.9%	97.6%	35,601
1997	108	1,969,679	1,874,790	95.18%	2.26%	8.5	66.1%	95.9%	94,889
1998	96	3,134,727	3,023,416	92.92%	2.26%	7.5	69.4%	93.3%	111,311
1999	84	4,515,126	3,916,539	90.66%	2.26%	6.5	72.8%	91.0%	598,587
2000	72	3,458,572	2,790,053	88.40%	2.26%	5.5	76.5%	88.8%	668,519
2001	60	6,862,214	5,910,890	86.14%	1.82%	4.5	80.3%	86.7%	951,324
2002	48	2,614,305	2,204,221	84.31%	5.84%	3.5	84.3%	84.3%	410,084
2003	36	2,294,394	1,800,600	78.48%	19.88%	2.5	88.5%	85.0%	493,794
2004	24	3,620,202	2,121,265	58.60%	46.00%	1.5	92.9%	88.9%	1,498,937
2005	12	7,657,101	964,403	12.59%	12.59%	0.5	97.6%	91.5%	6,692,698
					100.00%				11,555,744

Risk Free
Rate:

5%

	<u>Calculated</u>
Premium IIO:	88.4%
Reserve IIO:	90.1%

Reinsurance A		Reinsurance C	
Total Incurred	Total Paid	Total Incurred	Total Paid
1,913,908	1,890,021	130,846	119,132
1,676,226	1,635,559	293,453	239,231
2,801,516	2,723,641	333,211	299,775
4,110,430	3,558,863	404,696	357,676
2,929,337	2,338,639	529,235	451,414
6,094,103	5,217,038	768,111	693,852
2,103,947	1,783,471	510,358	420,750
2,066,717	1,663,841	227,677	136,759
3,468,623	2,079,483	151,579	41,782
7,480,038	950,043	177,063	14,360

**Calculation of Investment Income Offset
Reinsurance Liability
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168				1.78%	13.5	51.8%		
1993	156				3.74%	12.5	54.3%	97.6%	
1994	144				3.74%	11.5	57.1%	96.1%	
1995	132				3.74%	10.5	59.9%	94.0%	
1996	120	6,051,994	5,265,369	87.00%	3.74%	9.5	62.9%	91.8%	786,625
1997	108	7,061,768	5,879,940	83.26%	1.65%	8.5	66.1%	89.7%	1,181,828
1998	96	8,631,548	7,044,926	81.62%	4.71%	7.5	69.4%	86.5%	1,586,622
1999	84	10,124,506	7,786,370	76.91%	11.57%	6.5	72.8%	85.5%	2,338,136
2000	72	11,062,826	7,228,575	65.34%	1.87%	5.5	76.5%	86.8%	3,834,251
2001	60	9,334,845	5,924,631	63.47%	20.36%	4.5	80.3%	83.5%	3,410,214
2002	48	7,540,454	3,250,285	43.10%	8.26%	3.5	84.3%	86.0%	4,290,169
2003	36	6,818,009	2,375,750	34.85%	1.82%	2.5	88.5%	83.9%	4,442,259
2004	24	7,025,072	2,320,095	33.03%	0.61%	1.5	92.9%	80.3%	4,704,977
2005	12	7,997,713	2,592,727	32.42%	32.42%	0.5	97.6%	76.7%	5,404,986
					100.00%				31,980,067

Risk Free Rate: 5%

	<u>Calculated</u>
Premium IIO:	81.0%
Reserve IIO:	83.4%

**Calculation of Investment Income Offset
Financial/Mortgage Guaranty
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180					14.5	49.3%		
1992	168					13.5	51.8%		
1993	156					12.5	54.3%		
1994	144					11.5	57.1%		
1995	132					10.5	59.9%		
1996	120					9.5	62.9%		0
1997	108					8.5	66.1%		0
1998	96					7.5	69.4%		0
1999	84					6.5	72.8%		0
2000	72					5.5	76.5%		0
2001	60					4.5	80.3%		0
2002	48					3.5	84.3%		0
2003	36				38.05%	2.5	88.5%		0
2004	24	2,010,838	1,245,755	61.95%	54.46%	1.5	92.9%	97.6%	765,083
2005	12	2,058,851	154,154	7.49%	7.49%	0.5	97.6%	95.7%	1,904,697
					100.00%				2,669,780

Risk Free Rate: 5%

	Calculated
Premium IIO:	91.6%
Reserve IIO:	96.2%

**Calculation of Investment Income Offset
Products Liability
Using 2005 Industry Schedule P**

AY	Age	Total Incurred	Total Paid	Cumulative Paid	Incremental Paid	Time	Discount Factor	Reserve Discount Factor	Outstanding Reserves
1991	180				3.09%	14.5	49.3%		
1992	168				2.47%	13.5	51.8%	97.6%	
1993	156				2.47%	12.5	54.3%	95.0%	
1994	144				2.47%	11.5	57.1%	92.7%	
1995	132				2.47%	10.5	59.9%	90.4%	
1996	120	1,406,674	1,224,404	87.04%	2.47%	9.5	62.9%	88.3%	182,270
1997	108	1,571,811	1,329,372	84.58%	5.96%	8.5	66.1%	86.3%	242,439
1998	96	1,534,605	1,206,399	78.61%	4.31%	7.5	69.4%	86.5%	328,206
1999	84	1,755,878	1,304,677	74.30%	3.39%	6.5	72.8%	84.9%	451,201
2000	72	1,302,507	923,701	70.92%	9.59%	5.5	76.5%	82.8%	378,806
2001	60	1,658,876	1,017,406	61.33%	21.22%	4.5	80.3%	83.5%	641,470
2002	48	1,397,799	560,673	40.11%	14.10%	3.5	84.3%	85.9%	837,126
2003	36	1,518,811	395,076	26.01%	15.10%	2.5	88.5%	84.8%	1,123,735
2004	24	1,779,312	194,165	10.91%	8.59%	1.5	92.9%	83.6%	1,585,147
2005	12	2,040,389	47,332	2.32%	2.32%	0.5	97.6%	81.2%	1,993,057
					100.00%				7,763,457

Risk Free
Rate:

5%

	<u>Calculated</u>
Premium IIO:	77.8%
Reserve IIO:	83.8%

Occurrence		Claims Made	
Total Incurred	Total Paid	Total Incurred	Total Paid
1,245,982	1,099,526	160,692	124,878
1,395,408	1,195,417	176,403	133,955
1,409,520	1,098,278	125,085	108,121
1,624,070	1,194,310	131,808	110,367
1,136,940	817,271	165,567	106,430
1,411,300	809,874	247,576	207,532
1,297,584	506,200	100,215	54,473
1,366,517	352,179	152,294	42,897
1,590,251	173,868	189,061	20,297
1,752,240	45,075	288,149	2,257