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Reinsurance Considerations in Developing an Insurance Accounting Standard

By Albert Li, Andy Ferris and Darryl Wagner

The International Accounting Standard Board (IASB) and the Financial Accounting Standards Board (FASB) continue their work to develop an accounting for insurance contracts. In 2010 the IASB released an Exposure Draft (ED) and the FASB released a Discussion Paper (DP). A formal comment period was held shortly thereafter, and a wide range of comments were made. In February 2011, the boards began re-deliberations, and have since made a number of key tentative decisions, some of which are substantially different from the original ED/DP documents.

Our article in the June 2011 edition of the *Financial Reporter* briefly analyzed the redetermination of the residual margin, which was one of the topics being considered by the IASB at that time. In this month's edition, we briefly present some of the key reinsurance aspects, including those in the original ED/DP and related subsequent considerations and decisions. In particular we will illustrate alternative approaches to recognizing the gains and losses associated with reinsurance, as this is one area in which their current tentative decisions are substantially different from the original ED/DP.

DRAFT GUIDANCE FOR TREATMENT OF REINSURANCE

In the ED, the topic of reinsurance was addressed in paragraphs 43 – 46, with an example in paragraph B36. In the DP, reinsurance was addressed in paragraphs 108 – 111. Overall, the proposed treatment of reinsurance was generally consistent between the two documents.

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The ED called for the cedant to value a reinsurance contract at initial recognition as the sum of:

a. The present value of the reinsurance fulfillment cash flows (the expected present value of the cedant's future net cash inflows and outflows plus the risk adjustment); and

b. A residual margin.

It called for the reinsurance fulfillment cash flows to be measured using the same methodology as that for the underlying insurance contracts, but to also reflect the risk of non-performance by the reinsurer.

Note the presentation requirements of the ED/DP did not allow an insurer to offset reinsurance assets against insurance liabilities. Instead the approach is to value the insurance liability before the reinsurance, and then explicitly value the impact of the reinsurance. This is because the liability would not be extinguished and typically there would be no legal right of offset.

The requirements of the ED/DP then varied depending on whether the expected present value of the reinsurance fulfillment cash flows was positive or negative.

Scenario	Expected PV of Reinsurance Fulfillment Cash Flows	Approach Proposed by ED/DP
Reinsurance Gain	Positive (expected PV of future reinsurance cash inflows plus risk adjustment (ED) is greater than expected PV of future reinsurance cash outflows)	The cedant should recognize that full amount as a gain immediately at initial recognition of the reinsurance contract.
Reinsurance Loss	Negative (expected PV of future reinsurance cash inflows plus risk adjustment is less than expected PV of future reinsurance cash outflows)	The cedant should establish that amount as a distinct reinsurance margin, and recognize it over the coverage period (ED) or coverage and claims settlement period (DP) of the underlying insurance contract

At their meeting on May 31, 2011, the boards declared tentative decisions to change the requirements for reinsurance. Those tentative decisions are summarized below:

Scenario	New Approach Required by Tentative Decisions Declared on May 31
Reinsurance Gain	The cedant should establish that amount as a residual margin or composite margin, and recognize over the coverage period of the underlying insurance contract.
Reinsurance Loss, and the reinsurance coverage is for future events	The cedant should establish that amount as a reinsurance recoverable, representing a prepaid reinsurance premium, and recognize that cost over the coverage period of the underlying insurance contract.
Reinsurance Loss, and the reinsurance coverage is for past events	The cedant should recognize the loss immediately.

PRODUCT DESCRIPTION

To illustrate some of the reinsurance considerations in a transparent manner, we have intentionally utilized a simple term life insurance model:

- A single cell, male issue age 45 with face amount of $50,000

- Guaranteed fixed level annual premium payments for 10 years
  - $4.5 per $1000 of face ($225 annually)
  - No explicit policy fee used to determine annual premiums

- Commission of 75 percent in year 1 and 5 percent thereafter

- No cash value

- YRT Reinsurance Arrangement at 40 percent
  - Annual YRT Reinsurance Premiums per $1000 Face
  - Expense Allowance (100 percent incremental) — 50 percent of Acquisition, Maintenance and first year Commissions

Note this is the same model that we used in our June 2011 article to illustrate the residual margin redetermination concepts.

SELECTED KEY ASSUMPTIONS AND MODELING APPROACH

In this article, we have elected to show results in the single (composite) margin format preferred by the FASB, rather the dual margin format preferred by the IASB. Furthermore, all of our analysis is from the perspective of the cedant, not the reinsurer.

In determining the fulfillment cash flows, the DP calls for all assumptions to be best estimate without provision for adverse deviation (PADs), unlike US GAAP FAS 60 which utilizes PADs. Selected key assumptions used include the following:

Selected Key Assumptions	Best Estimate Value
Investment Yield	6 percent
Mortality	75 percent 2001 CSO
Lapse	5 percent annually
Non Commission Acquisition Expense	$75 per policy (75 percent deferrable)
Maintenance Expense	$10 per policy with 3 percent inflation

Just as we did for our June article, we have elected to use only a single scenario, primarily to keep the model simple enough to isolate certain aspects. The implicit assumption is that the single scenario reflects the mean of multiple scenarios, in keeping with the tentative decisions to clarify the requirements of the ED and DP with respect to cash flows.

Deferrable refers to whether or not the acquisition costs are eligible for inclusion in the fulfillment cash flow projections.

Furthermore, we have continued a simplified approach to interest discounting by utilizing a single fixed rate to discount all cash flows, regardless of duration. In addition, we have assumed the risk of non-performance by the reinsurer is not material.
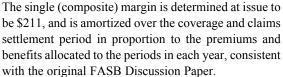
In the model, invested assets are equal to baseline statutory reserves and required capital, with distributable earnings released as earned. Investment income is then modeled as an earned rate (we assume 6 percent as noted above) applied to those invested assets.

MODEL RESULTS – BASE CASE (DIRECT GAIN, REINSURANCE LOSS)

In the base case, all future experience is assumed to emerge consistently with the initial assumptions. In the base case, the total net income for the 10-year period before reinsurance is $378, which is unchanged from our June article. After incorporating reinsurance in the base case, as shown in Chart A below, the total net income to the cedant is $226. This implies there is a gain before reinsurance and the reinsurance fulfillment cash flows are a net loss to the cedant.

The single (composite) margin is determined at issue to be $211, and is amortized over the coverage and claims settlement period in proportion to the premiums and benefits allocated to the periods in each year, consistent with the original FASB Discussion Paper.

Consistent with the ED/DP, the non-deferrable acquisition expenses ($19 in this example) in the first year are expensed immediately, creating a drag on income in the first year. We assumed all expense allowances and ceding commissions were part of the cash flows and thus the non-deferrable acquisition costs continued to be $19.

The reinsurance reduced the cedant's investment income, due to a reduced magnitude of net cash flows to be invested by the cedant. The interest on insurance contract liabilities, which one would intuitively expect

Albert Li, FSA, MAAA, is manager, Actuarial, Risk, & Analytics, for Deloitte Consulting LLP. He can be contacted at ali@deloitte.com

Andy Ferris, FSA, MAAA, is senior manager for Deloitte Consulting LLP. He can be contacted at anferris@deloitte.com

Darryl G. Wagner, FSA, MAAA, is principal & chief life actuary, Actuarial, Risk & Analytics, for Deloitte Consulting LLP. He can be contacted at dawagner@deloitte. com

to be negative (as the discounting of insurance contract liabilities unwinds), is actually positive in some years since the present value of cash flows is negative in those years.

Chart A (ED/DP Approach)

Direct Gain, Reins Loss	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	24	23	22	22	21	20	20	20	20	20	211
Amortization of Composite Margin - Reins.	(10)	(11)	(11)	(11)	(11)	(11)	(11)	(12)	(13)	(13)	(114)
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	-	-	-	-	-	-	-	-	-	-	-
Gains on reinsurance contracts	-	-	-	-	-	-	-	-	-	-	-
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	6	9	7	5	3	2	1	0	(0)	(0)	33
(e) Investment Income	2	12	13	15	15	15	14	12	10	7	115
Net Income	2	33	32	30	28	26	24	20	17	12	226

Finally, we note that this is a reinsurance loss scenario, which was impacted by the May 31 tentative decisions. As described above, those call for an insurer to set up a reinsurance recoverable and recognize that cost over the coverage period of the underlying contract. We did not explicitly model the reinsurance asset as required by that approach. We believe, however, that the composite margin amortization approach in Chart A above is likely not materially different from the amortization pattern resulting from the reinsurance asset approach, and, therefore, have amortized the reinsurance asset on the same basis as the composite margin.

MODEL RESULTS – SENSITIVITY 1 (DIRECT GAIN, REINSURANCE GAIN)

To illustrate the scenario of a direct gain and a reinsurance gain, we decreased the reinsurance premium rates by approximately 65 percent so as to generate a reinsurance gain scenario. In this case, the impact of reinsurance is to increase the income to the cedant. As noted above, the total 10-year income to the cedant before reinsurance was $378. Now, after incorporating a reinsurance gain, the total net income to the cedant is $489.

As described above, the original ED and DP called for any reinsurance gain to be fully recognized immediately upon recognition of the reinsurance contract. That approach is illustrated in the chart below, in which $131 is shown in the first year as a gain on reinsurance.

Chart B (ED/ DP Approach)

Direct Gain, Reins Gain	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	24	23	22	22	21	20	20	20	20	20	211
Amortization of Composite Margin - Reins.	-	-	-	-	-	-	-	-	-	-	-
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	-	-	-	-	-	-	-	-	-	-	-
Gains on reinsurance contracts	131	-	-	-	-	-	-	-	-	-	131
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	6	9	7	5	3	2	1	0	(0)	(0)	33
(e) Investment Income	4	14	15	16	17	17	16	14	12	9	133
Net Income	146	45	44	43	41	39	37	34	31	28	489

Another possible approach, which was mentioned in several comment letters, would be to measure the composite margin on a net after reinsurance basis, without showing the separate direct and reinsurance components. In Chart C below, we show this approach. Note that by netting the direct and reinsurance cash flows, the $131 first-year gain from reinsurance is eliminated and spread into the composite margin over time. We acknowledge that this approach was not adopted by either board, and have shown this only for the purpose of illustrating potential alternatives.

Chart C (Sample Comment Letter Approach)

Net after Reinsurance Building Block

Direct Gain, Reins Loss	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	24	23	22	22	21	20	20	20	20	20	211
Amortization of Composite Margin - Reins.	(10)	(11)	(11)	(11)	(11)	(11)	(11)	(12)	(13)	(13)	(114)
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	-	-	-	-	-	-	-	-	-	-	-
Gains on reinsurance contracts	-	-	-	-	-	-	-	-	-	-	-
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	6	9	7	5	3	2	1	0	(0)	(0)	33
(e) Investment Income	2	12	13	15	15	15	14	12	10	7	115
Net Income	2	33	32	30	28	26	24	20	17	12	226

A third approach is that of the May 31 tentative decision described previously. In this approach, the dual direct and reinsurance composite margins are maintained, and the reinsurance gain is amortized over time by the reinsurance margin. This approach is illustrated below in Chart D. By comparing this approach with that shown in Chart C above, we note that the combined approach in Chart C recognizes profits earlier due to smaller net after reinsurance cash flows in the later years.

Chart D (May 31 Tentative Decision Approach)

Direct Loss, Reins Gain	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	-	-	-	-	-	-	-	-	-	-	-
Amortization of Composite Margin - Reins.	-	-	-	-	-	-	-	-	-	-	-
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	(56)	-	-	-	-	-	-	-	-	-	(56)
Gains on reinsurance contracts	116	-	-	-	-	-	-	-	-	-	116
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	(1)	2	1	(0)	(1)	(1)	(2)	(2)	(2)	(1)	(8)
(e) Investment Income	2	11	13	14	15	15	14	12	10	7	112
Net Income	42	13	13	14	14	13	12	11	9	6	146

MODEL RESULTS – SENSITIVITY 2 (DIRECT LOSS, REINSURANCE GAIN)

To construct a scenario of direct loss and reinsurance gain, we decreased the direct premium rates by approximately 20 percent and decreased the reinsurance premium rates by approximately 65 percent relative to the base scenario. In this direct loss/reinsurance gain situation, there would be no margin established under the ED/DP approach, which is illustrated in Chart E below.

Chart E (ED / DP Approach)

Direct Loss, Reins Gain	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	-	-	-	-	-	-	-	-	-	-	-
Amortization of Composite Margin - Reins.	-	-	-	-	-	-	-	-	-	-	-
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	(56)	-	-	-	-	-	-	-	-	-	(56)
Gains on reinsurance contracts	116	-	-	-	-	-	-	-	-	-	116
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	(1)	2	1	(0)	(1)	(1)	(2)	(2)	(2)	(1)	(8)
(e) Investment Income	2	11	13	14	15	15	14	12	10	7	112
Net Income	42	13	13	14	14	13	12	11	9	6	146

If we combine the direct and reinsurance net fulfillment cash flows as suggested by some comment letters, we have a stream of net fulfillment cash flows that are positive to the cedant. Those cash flows are set up as a combined margin and recognized over time in this approach, as shown in Chart F.

Chart F (Sample Comment Letter Approach)
Net after Reinsurance Building Block

Direct Loss, Reins Gain	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Combined	7	7	7	6	6	6	6	5	5	5	60
(b) Gains / losses at initial recognition											
Loss recognition - net of reinsurance	-	-	-	-	-	-	-	-	-	-	-
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	(1)	2	1	(0)	(1)	(1)	(2)	(2)	(2)	(1)	(8)
(e) Investment Income	2	11	13	14	15	15	14	12	10	7	112
Net Income	(11)	20	20	20	20	19	18	16	14	11	146

Finally, under the May 31 tentative decision approach shown in Chart G, income recognition is deferred relative to the approach in Chart F. This is because in Chart G the direct loss is recognized immediately, while the reinsurance gain is recognized over time.

Chart G (May 31 Tentative Decision Approach)
Net after Reinsurance Building Block

	1	2	3	4	5	6	7	8	9	10	
Direct Loss, Reins Gain	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	-	-	-	-	-	-	-	-	-	-	-
Amortization of Composite Margin - Reins.	11	11	11	11	11	11	12	12	13	14	116
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	(56)	-	-	-	-	-	-	-	-	-	(56)
Gains on reinsurance contracts	-	-	-	-	-	-	-	-	-	-	-
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	(1)	2	1	(0)	(1)	(1)	(2)	(2)	(2)	(1)	(8)
(e) Investment Income	2	11	13	14	15	15	14	12	10	7	112
Net Income	(64)	24	24	25	25	24	24	23	21	20	146

MODEL RESULTS – SENSITIVITY 3 (DIRECT LOSS, REINSURANCE LOSS)

To construct a scenario of direct loss and reinsurance loss, we decreased the direct premiums by approximately 20 percent and left the reinsurance premium rates unchanged relative to the base case. In this dual-loss scenario under the ED/DP approach, there would be no margin established for the direct fulfillment cash flows as that loss would be recognized immediately. There would be a margin established for the reinsurance fulfillment cash flows, with that loss recognized over time as shown below in Chart H.

Chart H (ED / DP Approach)

Direct Loss, Reins Loss	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	-	-	-	-	-	-	-	-	-	-	-
Amortization of Composite Margin - Reins.	(12)	(12)	(12)	(12)	(12)	(13)	(13)	(14)	(14)	(15)	(129)
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	(56)	-	-	-	-	-	-	-	-	-	(56)
Gains on reinsurance contracts	-	-	-	-	-	-	-	-	-	-	-
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	(1)	2	1	(0)	(1)	(1)	(2)	(2)	(2)	(1)	(8)
(e) Investment Income	1	9	11	12	13	13	12	11	8	5	94
Net Income	(88)	(1)	(1)	(0)	(1)	(1)	(3)	(5)	(8)	(11)	(118)

If we combine the direct and reinsurance net fulfillment cash flows as suggested by some comment letters, when both are negative to the cedant, there is no margin established as the full loss is recognized immediately as show in Chart J.

Chart I (Sample Comment Letter Approach)

Net after Reinsurance Building Block

Direct Loss, Reins Loss	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Combined	-	-	-	-	-	-	-	-	-	-	-
(b) Gains / losses at initial recognition											
Loss recognition - net of reinsurance	(186)	-	-	-	-	-	-	-	-	-	(186)
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	(1)	2	1	(0)	(1)	(1)	(2)	(2)	(2)	(1)	(8)
(e) Investment Income	1	9	11	12	13	13	12	11	8	5	94
Net Income	(205)	11	12	12	12	11	10	9	7	4	(118)

Finally, the May 31 tentative decisions call for a reinsurance asset such as prepaid reinsurance premium to be established and recognized over the coverage period in the case of a reinsurance loss. We did not explicitly model the reinsurance asset, however, since we believe the composite margin approach in Chart J is likely not materially different from the reinsurance asset approach. Naturally, this defers recognition of the loss relative to the prior approach.

Chart J (Approximation to May 31 Tentative Decision Approach)

Direct Loss, Reins Loss	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total
(a) Underwriting margin											
Amortization of Composite Margin - Direct	-	-	-	-	-	-	-	-	-	-	-
Amortization of Composite Margin - Reins.	(12)	(12)	(12)	(12)	(12)	(13)	(13)	(14)	(14)	(15)	(129)
(b) Gains / losses at initial recognition											
Loss recognition of an insurance contract	(56)	-	-	-	-	-	-	-	-	-	(56)
Gains on reinsurance contracts	-	-	-	-	-	-	-	-	-	-	-
(c) Non-incremental acquisition costs	(19)	-	-	-	-	-	-	-	-	-	(19)
(d) Interest on insurance contract liabilities	(1)	2	1	(0)	(1)	(1)	(2)	(2)	(2)	(1)	(8)
(e) Investment Income	1	9	11	12	13	13	12	11	8	5	94
Net Income	(88)	(1)	(1)	(0)	(1)	(1)	(3)	(5)	(8)	(11)	(118)

CONCLUSION

We hope this analysis has been informative in illustrating some of the alternative potential approaches to recognizing gains and losses from reinsurance from the perspective of the ceding company. One observation we have made is that in some respects the guidance for reinsurance appears to be more from the perspective of short duration contracts than long duration contracts. The FASB has existing guidance on reinsurance, namely that of FAS 113—*Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts,* which also has been characterized by some as having primarily arisen from and being primarily oriented toward reinsurance issues for short duration contracts.

For example, in the case of a reinsurance gain, the approach by the ED/DP (recognizing the gain immediately) was not intuitive for long duration contracts and likely created unintended earnings volatility in the first year. The tentative decision to establish a reinsurance residual or composite margin and recognize the gain over the coverage period serves to more ratably spread the earnings pattern for long duration contracts relative to the approach in the ED/DP.

In the case of the dual direct loss and reinsurance loss, one could question whether the tentative decision approach goes too far, as it defers the recognition of the loss even where there is no future profit in either the direct or the reinsurance fulfillment cash flows. One might argue that the netting of the cash flows approach in that scenario may be the more diligent approach. One possible solution to these seemingly inconsistent results would be to have the net (of reinsurance) position of gain/loss on the contract serve as the trigger for how that gain/loss is recognized.

Stay tuned to future editions of the *Financial Reporter*, as we continue to analyze and present some of the challenges involved in developing a new accounting standard for insurance. ■