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Sir David Tweedie, Chair International Accounting Standards Board 30 Cannon Street London EC4M 6XH, United Kingdom Ms. Leslie F. Seidman, Acting Chair Financial Accounting Standards Board 401 Merrit 7 Norwalk, CT 06856-5116

Re: Insurance Contracts Exposure Draft (ED) – explicit margins (risk/residual vs. composite) Questions 4-6

Dear Sir David Tweedie and Ms. Leslie Seidman:

The American Council of Life Insurers (ACLI)¹ welcomes the opportunity to provide comments on the Insurance Contracts Exposure Draft (ED). The purpose of this letter is twofold. First, our response contains a set of examples prepared for the purpose of understanding the different margin approaches. Not only have these examples served as an educational tool for us, we also believe they could serve to educate the Boards by using an actual contract rather than hypothetical amounts. Secondly, the letter responds to questions 4, 5 and 6 asked in the ED. regarding which margin approach should be adopted (either the risk/residual or composite approach).

While this letter limits our response to questions related to margins, we want to express our concern about the pace of the project. The ACLI continues to support a high quality insurance contracts accounting standard. However, the differing IASB and FASB views on critical components-accounting models, margin approach, measurement of acquisition costs and presentation, need to be resolved before issuing a final standard. The due process necessary to achieve convergence should not be constrained by a June, 2011 target date. Setting a target is integral in the planning process of any project, but it is more important to get it right (quality accounting standard) than getting it done.

Summary

The accompanying examples, while limited by only presenting a 10 year term contact, represent the financial results under the risk/residual and composite margin approaches. Our observations based on these examples are:

- At inception the total amount of the risk/residual margin will equal the composite margin for "profitable"² contracts.
- The earnings pattern will vary over the contract life dependent on the run-off method.

¹ The American Council of Life Insurers represents more than 300 legal reserve life insurer and fraternal benefit society member companies operating in the United States. These member companies represent over 90% of the assets and premiums of the U.S life insurance and annuity industry.

² "Profitable" in this context assumes that the insurer is adequately compensated for the risk it assumes.

• An explicit margin, whether it is the risk/residual or composite margin approach, will likely result in materially different earnings pattern compared to current U.S. GAAP³ when subsequent measurement reflects deteriorating conditions.

Our analysis also examined the condition where, at inception, insurance contracts could be classified as onerous under the risk/residual margin approach yet profitable under the composite margin approach. This scenario could occur when the contract is priced such that the present value of the gross premiums is greater than the sum of the present value of benefits and expenses, but less than the sum of the present value of benefits, expenses and the risk adjustment.

The majority view of the ACLI members is that the composite margin approach better reflects the nature of the business and that the measurement of any asset and liability should be based on the terms of the contract with policyholders. Because a unanimous view could not be achieved, we have included the minority position and rationale in this letter. Both views are detailed in Appendix A.

This letter is organized in a way that offers a comprehensive presentation of the issues surrounding the two margin approaches along with our response to the three questions. The following sections are intended to articulate our observations and views.

- Objective, definition, and purpose of an explicit margin
- Comparison of the margin approaches risk/residual or composite
- Onerous contracts and effect on margins
- Disclosures
- Conclusion
- Response to questions 4, 5, and 6
- Appendix A and B

Objective, definition, and purpose of an explicit margin

In May 2007, the IASB released a Discussion Paper-Preliminary Views on Insurance Contracts (DP). The DP presented the view that the measurement of insurance contract liabilities centered on three basic building blocks:

- (a) an estimate of the future cash flows
- (b) the effect of the time value of money
- (c) a margin

Subsequent to the DP release, the IASB has refined its thinking about each of the building blocks. The concept of "a margin" expressed in the DP evolved into what has become known as a risk/residual margin approach. The result is a restatement of the building blocks in the ED that combines the estimate of future cash flows, time value of money and risk margin and expressed as follows:

An insurer shall measure an insurance contract initially at the sum of:

(a) the expected present value of the future cash outflows less future cash inflows that will arise as the insurer fulfils the insurance contract, adjusted for the effects of uncertainty about the amount and timing of those future cash flows (*present value of the fulfillment cash flows*) and

(b) a *residual margin* that eliminates any gain at inception of the contract. A residual margin arises when the amount in (a) is less than zero (ie when the expected present value

³ Under current U.S. GAAP, when the portfolio of contracts results in a loss, the provision for adverse deviation (PADs) is released serving as a buffer in the year the assumptions are unlocked.

of the future cash outflows plus the *risk adjustment* is less than the expected present value of the future cash inflows).

In order to effectively address the issues about the two margin approaches, our analysis separately identifies the risk adjustment component included in the measurement of (a). Separating the risk adjustment, i.e., risk margin, from (a) and taking it into account along with the residual margin facilitates the analysis and understanding of the two margin approaches.

During the ACLI deliberations about margins and before considering the two margin approaches in detail, our first task was to articulate the margin objective, definition, and purpose. In describing the objective of a margin, we considered the work of the International Actuarial Association (IAA) and their publication on Measurement of Liabilities for Insurance Contracts: Current Estimate and Risk Margins, which stated:

"Until the transferred obligations are settled, the insurer bears a current obligation. That obligation is measured for use in both regulatory and general purpose financial reporting as a liability. It is generally agreed that such a liability should consist of an estimate of the expected present value of cash flows plus a risk margin. The risk margin reflects the uncertainty associated with the expected cash flows."

Considering the IAA publication, the following margin objective and definition were developed:

<u>Objective of margins -</u> The amount the insurer would require to assume the risk of potential variability of future cash flows associated with a portfolio of insurance contracts.

Definition of "margins"

Margins are a provision for the uncertainty associated with the estimate of expected cash flows of insurance contracts.

With a clearly defined objective and definition, the purpose for margins in the estimate of insurance contract liabilities is to explicitly recognize in the measurement the uncertainty about the entity's expectation of the premiums, benefits, claim payments and costs of the insurance contracts.

Our objective statement differs from paragraph 35 of the ED. The ED objective statement, in our opinion, represents a transfer or exit approach, which is contrary to the measurement of insurance liabilities based upon fulfillment of the obligations as they come due. While our objective statement is different, we support the characteristics described in paragraph B72 as relevant in describing insurance contract risks. We recommend that the final accounting standard contain an objective statement and definition of margins that aligns with the fulfillment of the obligations as they come due and that our objective statement be considered as an appropriate substitute.

Comparison of the margin approaches – risk/residual or composite

In order to properly assess the margin approaches, we concluded that a baseline scenario using current U.S. GAAP guidance would be helpful by way of comparison to the effect of changes in measurement. Since we used a 10 year term contract as the basis for our correspondence regarding acquisition costs, we decided to use this term contract for consistency, ease of use, and understanding. SFAS No. 60, *Accounting and Reporting by Insurance Enterprises* (SFAS 60)⁴, contains guidance that establishes a liability for insurance contracts, which represents the present value of future benefits, less the present value of future net premiums (representing the portion of the premium needed to cover those benefits). It

⁴ ASC Topic 944-40-30-7 addresses the guidance for a liability for insurance contracts, ASC Topic 944-30-25-1 addresses capitalization and 944-30-35-1A the amortization of DAC is the codified U.S. GAAP guidance referenced above for SFAS 60. We use SFAS 60 within this letter for consistency with our previous correspondence.

also establishes an asset for acquisition costs that is deferred and charged to expense over time as profits emerge related to the business acquired. While we recognize that the SFAS 60 measurement approach is fundamentally different from the proposed guidance, nevertheless, we found it instructive in understanding the effect of the differences resulting from the two margin approaches.

As part of our deliberations we recognized conceptual challenges with margins. Some of our observations have been identified and deliberated by the Board in reaching its tentative decision but we list them below as a reminder of the challenges in reaching a final conclusion.

- The objective of financial reporting is to characterize the entity's financial condition to the outside world. Even a fulfillment approach must produce a result that is reliable and decisionuseful to outsiders. Therefore the element of "perception" is seemingly unavoidable.
- Even if the insurer pays the obligations to policyholders as they come due, it is required to hold additional capital to provide assurance that it can meet its obligations. This capital, because it cannot be invested in writing additional (profitable) insurance, has an economic cost.
- In a fulfillment context, a residual margin and the composite margin (in part) would be the entity's expected future profit.
- The absence of an explicit margin could mask the difference in risks, i.e., a risky liability could be identical to a less risky liability, most noticeably in an onerous contract situation.

As we developed our views about margins we took into account the following questions, which are often asked.

- Is there a degree of precision in the risk-residual approach that is unnecessary since the combined • amount is calibrated so that no gain at inception is recognized?
- If the Boards decide that the margin (under either approach) cannot be negative does that cause an • artificial constraint? For example, could the measurement of the risk margin cause the residual to be negative in order to achieve no gain at inception?
- What happens to the margin if subsequent measurement results in a loss? Is the margin re-• measured or set to zero?
- Should/could the risk adjustment and residual margin run off at different patterns? If yes does this • support the risk/residual margin approach? Would this lead to management gaming the system?
- Should the margin approach for general purpose (GAAP) financial reporting be consistent with • the accounting basis for solvency regulation, e.g., composite margin for both or risk/residual for both?

While there may not be clear answers to the questions, they continue to serve as core to our deliberations. The first set of examples illustrate the results where actual results equal expected, i.e., pricing = performance, comparing SFAS 60 (Example 1A), composite margin using a formula approach (Example 1B), composite margin using the FASB view (Example 1C), and risk/residual margin approach using the IASB view described in paragraph 50 of the ED (Example 1D). Details about each approach are contained in Appendix B.

				Su	immary F	lesults w	hen A	Actual	= Expect	ed				
	SFA	S 60 Approa	ach	Comp	Composite Approach			Composite Approach			Risk/	Risk/Residual Approach		
	<u>(E</u>	xample 1A)	<u>)</u>	<u>(E</u>	xample 1B	(Example 1C)			<u>)</u>	(Example 1D)				
Year	Income	Equity	ROE	Income	Equity	ROE	Inc	come	Equity	ROE	Income	Equity	ROE	
1	16.9	428.6	3.9%	17.5	429.2	4.1%		20.5	432.2	4.8%	20.0	431.7	4.6%	
2	28.4	383.2	7.0%	28.8	384.1	7.1%		31.1	389.5	7.6%	30.7	388.6	7.5%	
3	27.5	338.5	7.6%	27.8	339.7	7.7%		29.4	346.7	8.0%	29.1	345.5	7.9%	

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4	26.4	294.2	8.3%	26.5	295.6	8.3%	27.6	303.7	8.5%	27.4	302.3	8.5%
5	25.0	250.1	9.2%	25.1	251.5	9.2%	25.5	259.9	9.0%	25.5	258.6	9.1%
6	23.5	206.0	10.3%	23.4	207.4	10.2%	23.2	215.6	9.8%	23.4	214.4	9.9%
7	21.8	161.5	11.9%	21.7	162.8	11.7%	20.8	170.0	10.8%	21.1	169.2	11.0%
8	20.1	116.0	14.5%	19.8	117.0	14.1%	18.1	122.5	12.4%	18.6	122.2	12.8%
9	17.9	68.9	19.4%	17.4	69.4	18.7%	15.0	72.5	15.4%	15.8	73.0	16.1%
10	14.9	83.9	19.5%	14.5	83.9	18.9%	11.3	83.9	14.5%	10.9	83.9	13.8%

While this first set of examples represents only a single scenario, i.e., portfolio of 10 year term contracts, the following observations were made⁵.

- When business is expected to be profitable and results emerge that are consistent with expectations, the earnings pattern will tend to reflect the entity's expectations under either margin approach.
- The variability in results between the composite and risk/residual approaches will be influenced by the margin "run-off" methods used by the entity.
- The risk/residual approach with two components will tend to have greater variability than a single approach-composite because of re-measurement of the risk margin each period.

	SFAS 60 Approach		Com	Composite Approach			posite App	roach	Risk/R	Risk/Residual Approach				
	<u>(E</u>	Example 2A	<u>4)</u>	<u>(</u>	Example 21	<u>B)</u>	<u>(E</u>	Example 20	<u>_)</u>	<u>(</u>]	(Example 2D)			
Year	Income	Equity	ROE	Income	Equity	ROE	Income	Equity	ROE	Income	Equity	ROE		
1	16.9	428.6	3.9%	17.5	429.1	4.1%	20.5	432.2	4.8%	20.0	431.7	4.6%		
2	28.4	383.2	7.0%	28.8	384.2	7.1%	31.1	389.5	7.6%	30.7	388.6	7.5%		
3	27.5	338.5	7.6%	27.8	339.7	7.7%	29.4	346.7	8.0%	29.1	345.5	7.9%		
4	26.4	294.3	8.3%	26.5	295.6	8.4%	27.6	303.7	8.5%	27.4	302.3	8.5%		
5	(12.5)	281.7	(4.3%)	(46.5)	249.1	(17.1%)	(45.1)	258.5	(16.1%)	(43.7)	258.6	(15.6%)		
6	17.7	231.8	6.9%	22.4	204.0	9.9%	22.1	213.0	9.4%	21.9	212.8	9.3%		
7	15.4	180.9	7.5%	21.0	158.7	11.6%	19.9	166.6	10.5%	20.0	166.6	10.6%		
8	12.7	128.0	8.2%	19.2	112.3	14.2%	17.3	118.4	12.1%	17.6	118.6	12.3%		
9	9.5	72.5	9.5%	17.0	64.3	19.2%	14.3	67.7	15.4%	14.8	68.4	15.8%		
10	6.0	78.5	8.0%	14.3	78.5	20.0%	10.9	78.5	14.9%	10.2	78.5	13.9%		

Summary Results with 5th Year Loss

In this set of examples, the portfolio of term contracts experienced deteriorating performance resulting from an increase in lapse rates and mortality. The experience was severe enough to cause an unlocking of assumptions in the SFAS 60 approach. The effects of the unlocking and the release of PADs were reflected in the 5th year resulting in a loss of 12.5. The 5th year loss of 46.5 in the composite approach (Example 2B) and a loss of 45.1 in the FASB view (Example 2C) was significantly influenced by the lock-in of the margin factor at inception and applied each period to the current value of the estimate of future benefits and expenses. In a similar way, under the risk/residual approach (Example 2D) the 5th year loss was 43.7.

⁵ See the Appendix for details about the underlying assumptions used to produce the examples.

Based upon the 5th year loss scenario, we made the following observations.

- In all examples, the economic effect of the change in assumptions to reflect experience was reported in earnings resulting in a loss in the 5th year.
- The variability in the 5th year loss was highly dependent on the driver(s) selected for the margin run-off.
- Methods for measuring the margin, risk/residual or composite, that are not unlocked to reflect changes in experience will tend to produce results inconsistent with the economic reality not only in the 5th year but subsequent periods as well.

The following chart compares the margin balance at the end of each period under the composite and risk/residual approaches to assess the variability under the two scenarios-where actual equals expected and where the portfolio experiences a loss in the 5^{th} year. Where the contract is profitable at inception, and the run-off method is a systematic approach over the life of the business, it is unlikely that major differences will occur even when there is variability in performance as observed in the 5^{th} year loss scenario.

	EO	Y Margin Balanc	e-Actual=E	xpected		EOY Margin Balance-5th Year Loss							
	<u>Composit</u>	e Margin	Ex	ample 1D		<u>Composi</u>	te Margin		Example 2D				
Year	Example 1B	Example 1C	Risk	Residual	Total	Example 2B	Example 2C	Risk	Residual	Total			
1	70.5	65.8	42.7	23.8	66.5	70.5	65.8	42.7	23.8	66.5			
2	66.3	58.0	36.7	22.7	59.4	66.2	58.0	36.7	22.7	59.4			
3	61.3	50.5	31.0	21.3	52.3	61.2	50.5	31.0	21.3	52.3			
4	55.6	43.2	25.7	19.6	45.3	55.5	43.2	25.7	19.6	45.3			
5	49.1	36.1	20.7	17.5	38.1	50.2	35.7	19.4	16.1	35.6			
6	41.7	29.1	15.9	15.0	30.9	42.8	28.9	15.0	14.1	29.2			
7	33.2	22.0	11.3	12.0	23.3	34.1	21.9	10.6	11.4	22.0			
8	23.4	14.8	6.7	8.5	15.3	24.1	14.8	6.3	8.1	14.4			
9	12.3	7.5	2.2	4.5	6.7	12.6	7.4	2.1	4.3	6.4			
10	-	-	-	-	-	-	-	-	-	-			

Onerous contracts and effect on margins

The critical issue that needs to be answered is whether one margin approach performs better than the other at inception when a portfolio of long-duration contracts is onerous, i.e., potential loss at issue. To illustrate a loss at issue scenario, Example 3A, 10 year term measured under risk/residual margin-loss at issue, was developed that applied a different fact pattern to the risk adjustment calculation resulting in a higher risk margin. Instead of a net zero result at inception, the higher risk margin requirement produces a liability of 24.8 causing a loss at issue. The table below compares Example 1C, Composite Margin FASB view, to Example 3A. The notable difference occurs in the first year income results with lower earnings reported in Example 3A.

	Con	nposite Approacl	Risk/Residual Approach						
		(Example 1C)		(Example 3A)					
Year	Income	Equity	ROE		Income	Equity	ROE		
1	20.5	432.2	4.80%		7.8	419.5	1.88%		

2	31.1	389.5	7.60%	33.9	379.6	8.48%
3	29.4	346.7	8.00%	31.9	339.2	8.87%
4	27.6	303.7	8.50%	29.7	298.4	9.32%
5	25.5	259.9	9.00%	27.4	256.5	9.86%
6	23.2	215.6	9.80%	24.9	213.8	10.57%
7	20.8	170.0	10.80%	22.2	169.7	11.58%
8	18.1	122.5	12.40%	19.3	123.4	13.19%
9	15.0	72.5	15.40%	16.1	74.5	16.23%
10	11.3	83.9	14.50%	9.4	83.9	11.85%

Disclosures

Because disclosures are an essential part of financial reporting, we offer the following comments and recommendations. The disclosure objective is stated as the following in paragraph 79:

"To help users of financial statements understand the amount, timing, and uncertainty of future cash flows arising from insurance contracts."

Actual cash flows arising from insurance contracts are subject to the following risks: mortality, morbidity, persistency, investment margin, and expense margin. Therefore, the disclosure requirements should focus on information about the entity's risk management. The disclosure requirements drafted in the ED in support of the stated objective in paragraph 79 actually serve to substantiate the ACLI's points made in this letter concerning the margin objective. The proposed disclosure requirements requiring reconciliation of all components of the insurance liability including the risk/residual margin, will not be helpful to users of financial statements in understanding the amount, timing, and uncertainty of actual cash flows for long-duration insurance contracts. Regardless of the margin outcome (composite or risk/residual margin), the disclosure requirements are overly burdensome and without regard to materiality or priority. While meaningful disclosures are important to the understanding of the financial statements, the volume of disclosures will likely cause greater confusion and misunderstanding.

In addition to insurance risk, the company is exposed to credit risk from reinsurers. The qualitative and quantitative disclosures proposed in paragraph 91 recognize the primary risks related to pricing longduration insurance contracts, which we support. However, we do not believe that detailed disclosures about margins provide users with decision useful information especially when, for example, the residual margin or composite margin is nothing more than a systematic run-off over a period of time. We plan to address disclosures in greater detail along with our responses to the other questions.

Conclusion

As the Boards continue their deliberations about margins, we recommend that first and foremost a clearly articulated objective and definition, which is consistent with the fulfillment of the contract, be developed and that the language in this letter serve as a starting point. With regard to the choice between risk/residual margin or composite margin, we offer the following observations.

• For long-duration contracts, especially life contracts, the margin should run-off over the coverage period.

- No specific run-off method should be prescribed since no single method is known to work for all contracts. Instead general guidance and/or examples should be included to describe how the reporting entity should run-off the margin in a way that is consistent with the release from risk.
- While the ACLI does not have a consensus view about margins, the majority view supports the composite margin approach in the belief it better reflects the nature and economics of the contract with the policyholder and aligns with the IASB Conceptual Framework. The minority view supports the risk/residual margin in the belief it better reflects the economics of the business. Regardless of the outcome, we encourage the Boards to carefully consider the merits of both views.

Our comments and recommendations contained in this letter are based upon the current views expressed by the IASB and FASB. As those views change we may also need to update or refine our recommendations. We welcome the opportunity to meet with staff and Board members to discuss the contents of this letter.

Sincerely,

Cc: Marc Siegel, FASB Board member Russ Golden, FASB Board member Warren McGregor, IASB Board member Peter Clark, IASB staff Andrea Pryde, IASB staff Sandra Hack, IASB staff Jennifer Weiner, FASB staff Trent Handy, FASB staff

Question 4 – Risk adjustment versus composite margin (paragraphs BC105–BC115)

Do you support using a risk adjustment and a residual margin (as the IASB proposes), or do you prefer a single composite margin (as the FASB favours)? Please explain the reason(s) for your view.

ACLI Response:

The majority of ACLI members favor a single composite margin because the composite margin is conceptually consistent with the definition of a liability, the accounting Framework, and the nature and economics of the business. Some member companies, representing the minority view in favor of the risk/residual margin approach, offer counter positions that support an explicit risk margin reflecting an economic valuation of the insurance contract liability. Appendix A contains a detailed description of the majority and minority views.

Question 5 – Risk adjustment (paragraphs 35-37, B67-B103 and BC105–BC123)

(a) Do you agree that the risk adjustment should depict the maximum amount the insurer would rationally pay to be relieved of the risk that the ultimate fulfilment cash flows exceed those expected? Why or why not? If not, what alternatives do you suggest and why?

(b) Paragraph B73 limits the choice of techniques for estimating risk adjustments to the confidence level, conditional tail expectation (CTE) and cost of capital techniques. Do you agree that these three techniques should be allowed, and no others? Why or why not? If not, what do you suggest and why?

(c) Do you agree that if either the CTE or the cost of capital method is used, the insurer should disclose the confidence level to which the risk adjustment corresponds (see paragraph 90(b)(i))? Why or why not?

(d) Do you agree that an insurer should measure the risk adjustment at a portfolio level of aggregation (ie a group of contracts that are subject to similar risks and managed together as a pool)? Why or why not? If not, what alternative do you recommend and why?

(e) Is the application guidance in Appendix B on risk adjustments at the right level of detail? Do you have any comments on the guidance?

ACLI Response:

(a) No. The ACLI majority view supports a composite margin. The composite margin is consistent with the ACLI view on the margin objective, which is the amount required to assume the risk. It is not an exit amount-the amount the insurer would pay to be relieved of the risk, expressed in the ED.

If the final decision is to adopt a risk/residual margin approach, the minority view of ACLI members believe that some modification of the wording may be needed. In theory, the risk adjustment should simulate the market price of risk. Market input should be used if available; otherwise, entity-specific estimates should be used. To foster consistency, the standard should require that the risk adjustment be calculated using a market consistent technique. With actuarial standards of practice and appropriate disclosure, it is likely that reasonable comparability will emerge over time.

In addition, the phrase "risk that the ultimate fulfillment cash flows exceed those expected" may create confusion because the "ultimate fulfillment cash flows" would include future inflows, and an excess of future inflows would be beneficial to the insurer. Suggested alternative language

could be: "The risk adjustment should depict the maximum amount that the insurer would rationally pay to eliminate the uncertainty about the amount and timing of the ultimate fulfillment cash flows."

The ACLI responses to parts (b) - (e) are based upon input from member companies that support the risk/residual margin approach.

- (b) No. We do not agree that these three techniques should be allowed and no others. This is an area of rapidly emerging practice, which makes it unwise to limit the techniques. In general, we think the standard should state the principle but not limit the techniques that may be used to satisfy the principle.
- (c) No, we do not agree with this disclosure. We think robust disclosure of the method used to calculate the risk adjustment would provide practical consistency over time.
- (d) We support a broader definition of diversification that would allow for diversification between portfolios, legal entities, segments, and geographies to be taken. This would allow for the insurer's financial performance to more accurately reflect its true economic performance. The company's who support the composite margin do not support a broader definition of diversification.
- (e) We think that confusion exists about the reason for and purpose of the risk adjustment, and Appendix B of the ED could more helpfully explain the logic behind it. The guidance should better describe *why* an amount should be added to the discounted probability-weighted cash flows at all. Simply saying that it "conveys information...about the effects of uncertainty" could imply that it is a judgmental adjustment, possibly reflecting prudence. In an economic measurement approach, the risk adjustment is necessary to reflect economic risk aversion, as a risky liability is perceived as "worse" than a certain one. The company's who support the composite margin believe the split of the margin between risk and residual is judgmental.

The cost of capital illustration in Appendix B of the ED may imply that only one version of the cost of capital technique—the one illustrated—is permissible. It may be more helpful to reflect that level of guidance in actuarial literature.

Question 6 – Residual/composite margin (paragraphs 17(b), 19–21, 50–53 and BC124–BC133)

(a) Do you agree that an insurer should not recognise any gain at initial recognition of an insurance contract (such a gain arises when the expected present value of the future cash outflows plus the risk adjustment is less than the expected present value of the future cash inflows)? Why or why not?

(b) Do you agree that the residual margin should not be less than zero, so that a loss at initial recognition of an insurance contract would be recognised immediately in profit or loss (such a loss arises when the expected present value of the future cash outflows plus the risk adjustment is more than the expected present value of future cash inflows)? Why or why not?

(c) Do you agree that an insurer should estimate the residual or composite margin at a level that aggregates insurance contracts into a portfolio of insurance contracts and, within a portfolio, by similar date of inception of the contract and by similar coverage period? Why or why not? If not, what do you recommend and why?

(d) Do you agree with the proposed method(s) of releasing the residual margin? Why or why not? If not, what do you suggest and why (see paragraphs 50 and BC125–BC129)?

(e) Do you agree with the proposed method(s) of releasing the composite margin, if the Board were to adopt the approach that includes such a margin (see the Appendix to the Basis for Conclusions)? Why or why not?

(f) Do you agree that interest should be accreted on the residual margin (see paragraphs 51 and BC131–BC133)? Why or why not? Would you reach the same conclusion for the composite margin? Why or why not?

ACLI Response:

- (a) Yes, we agree that at inception no gain should be recognized since the insurer has not yet performed under the terms of the contract. However, the ACLI majority view is that no gain at inception should be measured without an explicit risk adjustment, i.e., composite margin (FASB view). The ACLI minority view supports the proposed IASB guidance.
- (b) ACLI members that support the risk/residual margin approach agree that the residual margin should not be less than zero such that a loss at inception would be recognized immediately.
- (c) It is our understanding that the reason for estimating the residual or composite margin at a level of aggregation as described in paragraph 20 of the ED, is that the run-off of the margin is different from the re-measurement of the present value of cash inflows and outflows. While we agree with the level of aggregation for margins, we recommend that the guidance be made clearer related to the level of aggregation at subsequent measurement. For example, in paragraph 21, language should be added that redefines "portfolio" at a level of aggregation based upon the entity's business model and the way the entity manages the business.
- (d) No. The company's who support the composite margin believe the margin should be run-off as the insurer is released from risk. No specific run-off method should be prescribed since no single method is known to work for all contracts. Instead general guidance and/or examples should be included to describe how the reporting entity should run-off the margin in a way that is consistent with the release from risk.

Companies supporting the risk/residual margin believe that the release of the residual margin should be based on the passage of time, not with release on the basis of the pattern of claims and benefits. The residual margin represents deferred risk-adjusted profit and is thus distinct from the pattern of cash flows and the risk of the contract, both of which are already fully reflected in other aspects of the measurement. Thus the residual margin should emerge along a pattern more closely aligned with the passage of time than with benefits or insurance risk. Because the residual margin represents deferred risk-adjusted profit, a theoretical argument could be made to recalibrate it for changes in assumptions. The ACLI has not discussed nor concluded on whether such an approach would create onerous operational burdens. We also have not concluded on whether the recalibration should include financial assumptions or just operating assumptions.

- (e) No. We do not believe a single method exists that would work for all contracts.
- (f) No. On balance, we believe that interest should <u>not</u> be accreted on the residual margin. We can see some merit to accreting interest in order to allow the cost of funds to be tracked in the income statement. Implementation, however, would seem to pose significant challenges. The ED calls for accretion of interest "using the discount rate specified in paragraph 30..." However, the "rate specified in paragraph 30" is not a single interest rate. Rather it is a vector (or perhaps a matrix) of rates that vary according to the timing of cash flows. For the math to work properly, interest should be accreted using forward rates derived from the original vector, not the vector itself. Furthermore, the rates specified in paragraph 30 apply to cash flows according to when those cash flows occur. The residual margin is not a set of cash flows, so there is no timing of cash flows from which to select the appropriate rate(s) from the vector. As a result it would be necessary to somehow approximately allocate the residual margin into buckets and then apply a different accretion rate to each bucket in each future reporting period. All of this would be required to effect period-to-period reporting for a balance sheet item that many users may be inclined to ignore anyway. Accordingly, we believe that interest should not be accreted on the

residual margin, as the theoretical merits do not seem to overcome the practical complexities that accretion would create.

Appendix A: Rationale for the majority support for a single composite margin

The majority of ACLI member companies expressing a view in support of a single composite margin approach based their decision on the following key points.

- 1. The margin should reflect the nature and economics of the business, i.e., the price charged the customer/policyholder.
- 2. At inception, the margin represents deferred revenue, i.e., profits, to be earned over the life of the coverage as the insurer is released from risk and a composite margin captures this provision.
- 3. The margin approach (composite margin) for insurance contracts should be consistent with other GAAP guidance most notably the current views expressed in the joint IASB/FASB Exposure Draft-Revenue from Contracts with Customers-specifically with respect to paragraphs 54-56 related to onerous performance obligations where the measurement does not contain a risk adjustment.
- 4. The primary objective for an explicit risk adjustment, we believe, is to meet specific regulatory requirements (conservatism in the measurement), which does not meet the GAAP definition of a liability nor is it consistent with the Framework. While insurance risk is a fundamental element of insurance contracts, the fulfillment measurement model recognizes the risks in the building blocks by requiring an explicit margin that does not necessarily translate into the separation of every risk component.

While all of the information needs of these users cannot be met by financial statements, there are needs which are common to all users. As investors are providers of risk capital to the entity, the provision of financial statements that meet their needs will also meet most of the needs of other users that financial statements can satisfy.⁶

- 5. A composite margin is not as complicated to administer as the risk/residual margin and minimizes any abuse that could result in managing the run-off pattern of a two margin approach. A composite margin removes the conjecture in determining margins. The composite margin would be more concise, verifiable and transparent, and should facilitate focusing on the total margin available in the reserve rather than on arbitrary divisions, i.e., a specific risk adjustment. Utilizing a composite margin assures that the margin balances back to pricing in sum total; and therefore provides the most practical foundation on which to base disclosure, analysis and predictions related to the business. The subjectivity inherent in the arbitrary division of the risk/residual margin obfuscates comparison across reporting entities while the intent of disclosing information related to the margin is exactly the opposite.
- 6. While it is possible to define methods for assigning values to risk margins, we believe that these are mathematical calculations that have meaning primarily for solvency purposes. Even using only the three methods sanctioned by the board, the result is likely to be very different depending on which method is used and what parameters are used.
- 7. There is great concern that the inherent imprecision in segregating the margin ultimately affects profit recognition. At the same time, the reporting entity will be held accountable for the incidence of profit recognition and have more than inconsequential difficulty explaining the ultimate impacts on profit if the results of operations are based on hypothetically determined bifurcation of and recognition of the profit margin.
- 8. If a user wants to understand the risk in an insurer's reserves, there are better ways to provide that information, such as through disclosure of actual to expected results and through sensitivity calculations. The risk / residual margin approach is likely to mislead the user into thinking that

 $^{^6}$ Extracted from Framework for the Preparation and Presentation of Financial Statements. @ IASC Foundation.

the residual margin is a profit provision rather than what it is, an arbitrary division of the available margin.

- 9. Preliminary analysis of the various risk adjustment methods has shown that the two margin approach could result in more onerous contracts at initial recognition when compared to the same contracts measured using the composite margin approach. While it may appear more appropriate to call out these onerous contracts upon initial measurement, the two margin approach does not ensure an accurate representation of the true economics of the business.
- 10. As a result of the reasons previously noted, the cost of calculating and updating the residual margin and the risk adjustment outweigh the benefits.

Minority view

The minority of ACLI member companies support an economic measurement model incorporating a separate risk adjustment and a residual margin for the following reasons:

- 1. The risk adjustment and residual margin have distinct purposes. The **risk adjustment** (or risk margin) is compensation for bearing risk. Such compensation is necessary due to *economic risk aversion*, the tendency of individuals and organizations to prefer a certain payoff over an equal but uncertain payoff. The **residual margin**, on the other hand, is compensation for the insurer's entrepreneurial effort, sunk costs, overhead expenses, and business risks not specific to the contract. It is therefore erroneous to assert that the risk/residual approach involves a *split* of the single composite margin.
- 2. Because the risk adjustment is intended to reflect risk aversion, not to provide arbitrary conservatism, it is essential and appropriate both for solvency accounting and for general purpose accounting.
- 3. In contrast to the risk/residual approach, the composite margin approach fails to reflect economic risk aversion. It is simply an allocation of expected future profits. As a result, the entire measurement model becomes non-economic.
- 4. The composite margin may be zero even though uncertainty exists in the obligation, implying that the insurer is risk neutral, not risk averse. Efforts to address this flaw in the composite margin model typically end up requiring the calculation of a risk adjustment.
- 5. In the risk/residual model, profits from the risk adjustment are recognized as the insurer is released from risk. In the composite margin model, the composite margin is released according to a predefined driver. This is likely to mask the insurer's current period economic performance.
- 6. The risk/residual model allows for a robust, current assessment of risk. If risk increases or decreases, the risk/residual model will reflect it. In the composite model, if risk increases or decreases, the balance sheet will be unaffected.
- 7. The composite margin model is inconsistent with the use of market inputs. Market consistent valuation theory indicates that a risk margin is needed only for "non-hedgeable" risks, i.e. only for those inputs not generated by market prices (e.g. mortality, morbidity, policyholder behavior). The reason for that limitation has to do with risk aversion, i.e. market prices already reflect the risk aversion of market participants. Consequently, eliminating risk margins while retaining the use of market prices for hedgeable risks would lead to a disparate treatment of hedgeable and non-hedgeable risks.

- 8. The composite margin model creates perverse incentives to underprice non-hedgible risk. Because the composite margin represents expected future profits, which would be perceived to be favorable, an insurer would have a short-term incentive to underprice non-hedgeable risks in order to gain market share. The higher volume would increase the aggregate composite margin but not in proportion to the increased risk, which would not be shown
- 9. The composite model penalizes insurers who write very profitable business (on a risk-adjusted basis) by implying that such business contains more risk than it actually does.
- 10. The composite margin model is inconsistent with the way that insurers have priced and managed their businesses for at least a generation. Most product pricing has typically involved the risk margin concept in some form. Insurance appraisals frequently use the "cost of capital" approach to add an additional amount to the price. Embedded value and economic capital calculations employ risk margins. For solvency purposes, risk margins are required under the Swiss Solvency Test and will be required under Solvency II. As a result, arguments that risk margins cannot be calculated amount to saying that insurers cannot do what they are already doing.

The insurance business is the risk business. It is difficult to see why a modern financial reporting framework for insurance should exclude measuring, reporting, and quantifying risk. As a result, we believe the risk/residual model, accompanied by an appropriate disclosure framework that would lead to practical convergence, would provide users of financial statements with essential and decision-useful information about the insurer's true economic position.

Appendix B: Illustrations of insurance contracts

The ED describes the current views of the IASB and FASB with regard to the explicit margin. While noting that at contract inception both Boards agree that there will be no day one gain, the Boards differ on the measurement of the explicit margin. The IASB supports the margin approach - a risk margin and residual margin, while the FASB supports a single composite margin. Both measurement approaches contain an amount (margin) calibrated at inception as the difference between the cash inflows, premiums charged the customer, and cash outflows, the measurement of incremental contract costs and the benefits/claim payments for profitable contracts.

The illustrations were developed to further enhance the understanding of the potential effect of the financial results under the risk/residual margin approach and the composite margin approach. As a baseline, an illustration using current U.S. GAAP (SFAS 60) was developed. The examples contained in this document are based upon the illustrations contained in the ACLI letter to the IASB and FASB dated January 29, 2010 and the May 28, 2010 letter to FASB on acquisition costs. In those letters we illustrated various scenarios based upon a portfolio of \$200,000 10 year term contracts issued at age 45.

The elements of the contract are:

10 year Term insurance contract									
Assumptions:									
Age:	45								
Face Amount:	\$200,000								
Annual premium \$415.00									
At inception (SFAS No. 60):PV of future benefits including PADs\$1,453.5PV of expenses (acquisition & maintenance)1,026.3Total\$2,479.8									
PV of gross premiums		\$2,484.3							
Earned rate of investment portfolio 6.0%									
Discount rate in measu	rement of liabilities	4.5%							

Underlying accounting guidance

The starting point for the illustrations is current U.S. GAAP. Under SFAS No. 60, "the liability, which represents the present value of future benefits to be paid to or on behalf of policyholders and related expenses less the present value of future net premiums (portion of **gross premium** required to provide for all benefits and expenses), shall be estimated using methods that include assumptions, such as estimates of expected investment yields, mortality, morbidity, terminations, and expenses, applicable at the time the insurance contracts are made. The liability also shall consider other assumptions relating to guaranteed contract benefits, such as coupons, annual endowments, and conversion privileges. The assumptions shall include provision for the **risk of adverse deviation (PADs).**"

The following provides a brief description of the examples contained in this letter.

The first set of examples (1A thru 1D) assume that actual performance equals expected, that is, earnings will emerge as expected with no changes in the underlying assumptions-lapse rates, mortality and interest.

SFAS No. 60 Approach-Example 1A

The first example, SFAS No. 60 Approach, illustrates the financial results that an insurer would typically recognize for a portfolio of 10 year term contracts. In this illustration, the assets include a provision for deferred acquisition costs and invested assets. The liabilities not only include an estimate of the insurance contract liabilities but also include a deferred tax liability representing the tax effect of the timing differences in taxable income and financial income. The income statement details the revenues, benefits, and expenses arriving at net income before taxes. Since an insurer would only maintain sufficient capital to manage the business, a dividend is included showing that each year's excess capital would be deployed to other parts of the business. Note that in this example the return on equity tends to be a relatively stable amount each year.

Composite margin in measurement-Example 1B

The second example, composite margin in measurement-Example 1B, is based upon the building blocks approach for the measurement of insurance contract liabilities. Similar to the first example sufficient capital is provided at inception in order to support the business. In this example, we assume a composite margin approach in the measurement of the insurance contract liabilities and include all cash flows associated with the contract. Note that at inception, the present value of expenses and benefits when compared to the present value of future gross premiums results in a margin of 73.7. A margin formula was developed at inception for the purpose of determining the runoff over time of the margin. The formula calculates the margin over current estimate – "MOCE", and locks in that ratio at inception and applies the ratio at each subsequent period to the re-measured liability. The formula is:

MOCE =	PVPREM-(PVBEN+PVEXP)	_ =	Profit Margin
	PVBEN+PVEXP(less acquisition costs)	=	PV Cash Outflows
The margin ratio of .0	437 was calculated and locked in at incept	ion.	

Composite margin-FASB view-Example 1C

The third example, composite margin-FAB view-Example 1C, illustrates the effect of the margin runoff based upon the current FASB view expressed in their recently exposed Discussion Paper. The ratio formula is:

(Premiums allocated to date + claims and benefits paid to date)

(Total expected premiums + total expected claims and benefits)

Risk/residual margin in measurement-Example 1D

The fourth example, risk/residual margin in measurement-Example 1D, illustrates the effect using a risk/residual margin approach as proposed by the IASB in their ED, specifically with respect to paragraph 50(b) describing the run-off over the expected timing of incurred claims and benefits. A cost-of-capital method was used to calibrate the risk margin each period with the residual calibrated as the difference such that no gain at issue results. At inception, the composite margin and risk/residual margin produce the same total margin amount.

Second set of examples (2A thru 3A)

The second set of examples assumes that actual performance changed from expectations in the 5^{th} year causing a loss in that year. In the 5^{th} year the reporting entity experienced an unexpected increase in lapses to 15% from the 8% projected rate and experienced a 10% increase in death rate (mortality) that is expected to continue for the block of business.

SFAS No. 60 Approach-Example 2A

Under current U.S. GAAP (SFAS 60), a premium deficiency would result due to the change in expectations and assumptions are unlocked with best estimate used to re-measure the liabilities. The release of PADs helps buffer the 5th year loss.

Composite margin in measurement-Example 2B, Composite margin-FASB view-Example 2C, Risk/residual margin in measurement-Example 2D

The approach used in these examples is consistent in that the full effect of the change in assumptions is reflected in the 5^{th} year. Unlike the release of PADs in the SFAS No. 60 example, the runoff method for the composite margin and residual margin were not re-measured.

Risk/residual margin-Example 3A

This example illustrates a loss at issue resulting when the sum of the present value of benefits, expenses and risk adjustment is greater than the present value of premiums. This example differs from 1D in that a higher risk margin was assumed. To understand the financial difference of this example, it should be compared to examples 1B and 1C.

SFAS No. 60 Approach-Examp	ole 1A										
	<u>Year 0</u>	<u>Year 1</u>	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	<u>Year 10</u>
Assets:											
Invested assets	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9
DAC		<u>628.9</u>	<u>542.5</u>	<u>462.6</u>	<u>387.5</u>	<u>316.9</u>	<u>250.2</u>	<u>186.2</u>	<u>123.3</u>	<u>61.3</u>	<u>0.0</u>
Total Assets		801.6	835.2	838.3	814.9	763.4	682.8	568.4	419.5	235.5	83.9
Liabilities:											
PV of liabilities		152.9	262.1	337.9	385.0	402.4	389.2	341.7	260.3	145.1	(0.0)
Deferred Tax Liability		<u>220.1</u>	<u>189.9</u>	<u>161.9</u>	<u>135.6</u>	<u>110.9</u>	<u>87.6</u>	<u>65.2</u>	<u>43.2</u>	<u>21.5</u>	<u>0.0</u>
Total Liabilities		373.0	452.0	499.8	520.6	513.3	476.8	406.9	303.5	166.6	0.0
Required Surplus	0.0	417.1	371.2	326.0	281.3	236.6	192.0	147.0	100.9	53.2	0.0
Free Surplus	<u>430.0</u>	<u>11.5</u>	<u>12.0</u>	<u>12.5</u>	<u>13.0</u>	<u>13.5</u>	<u>14.0</u>	<u>14.5</u>	<u>15.1</u>	<u>15.7</u>	<u>83.9</u>
Total Equity	430.0	428.6	383.2	338.5	294.2	250.1	206.0	161.5	116.0	68.9	83.9
Total Liabilities & Equity	430.0	801.6	835.2	838.3	814.9	763.4	682.8	568.4	419.5	235.5	83.9

10 year term measured under SFAS 60 – baseline (actual = expected)

SFAS No. 60 Approach-Example 1A	<u>\</u>									
Income:	<u>Year 1</u>	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	<u>Year 10</u>
Premium revenue	415.0	377.5	343.2	315.5	289.9	266.4	247.3	234.6	222.4	210.7
Investment income	<u>4.3</u>	<u>30.2</u>	<u>35.6</u>	<u>39.2</u>	<u>40.9</u>	<u>40.8</u>	<u>39.0</u>	<u>35.3</u>	<u>29.5</u>	<u>21.5</u>
Total gross income	419.3	407.7	378.8	354.7	330.8	307.2	286.3	269.9	251.9	232.2
Benefits & Expenses:										
Benefits	96.0	122.2	138.9	153.3	168.8	184.9	206.0	228.8	250.3	267.3
Expenses	773.3	46.2	42.0	38.6	35.5	32.6	30.2	28.7	27.2	25.8
Change in DAC	(628.9)	86.4	79.9	75.1	70.7	66.7	63.9	62.9	62.0	61.3
Change in reserves	<u>152.9</u>	<u>109.3</u>	<u>75.7</u>	<u>47.2</u>	<u>17.4</u>	<u>(13.1)</u>	<u>(47.5)</u>	<u>(81.4)</u>	<u>(115.2)</u>	<u>(145.1)</u>
Total benefits & expense	393.3	364.1	336.5	314.0	292.3	271.0	252.6	238.9	224.4	209.3
Pre-tax net income	26.0	43.7	42.2	40.6	38.5	36.2	33.6	30.9	27.6	22.9
FIT	<u>9.1</u>	<u>15.3</u>	<u>14.8</u>	<u>14.2</u>	<u>13.5</u>	<u>12.7</u>	<u>11.8</u>	<u>10.8</u>	<u>9.7</u>	<u>8.0</u>
Post-tax net income	16.9	28.4	27.5	26.4	25.0	23.5	21.8	20.1	17.9	14.9
Dividends	18.3	73.8	72.2	70.6	69.2	67.6	66.3	65.6	65.0	
Post Tax ROE (Total Avg. Equity)	3.9%	7.0%	7.6%	8.3%	9.2%	10.3%	11.9%	14.5%	19.4%	19.5%

10 year term measured under SFAS 60 – baseline (actual = expected)

Composite margin in measurement-Example 1B											
Margin ratio =	0.0437										
Assets:	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
Invested assets	<u>430.0</u>	<u>172.7</u>	<u>292.7</u>	<u>375.7</u>	<u>427.4</u>	<u>446.5</u>	<u>432.6</u>	<u>382.2</u>	<u>296.2</u>	<u>174.2</u>	<u>83.9</u>
Total Assets	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9
Liabilities:											
PV of future benefits	1,384.3	1,350.6	1,289.1	1,208.2	1,109.3	990.4	850.1	682.4	484.3	255.8	
PV of expenses	1,026.3	264.4	228.1	194.5	162.9	133.2	105.2	78.3	51.8	25.8	
PV of future gross premiums	2,484.3	2,162.4	1,865.3	1,590.5	1,332.4	1,089.4	860.1	640.3	424.0	210.7	
Margins	<u>73.7</u>	<u>70.5</u>	<u>66.3</u>	<u>61.3</u>	<u>55.6</u>	<u>49.1</u>	<u>41.7</u>	33.2	<u>23.4</u>	<u>12.3</u>	
PV of liabilities	0	(476.9)	(281.8)	(126.6)	(4.6)	83.3	136.9	153.6	135.6	83.1	(0.0)
Deferred Tax Liability		<u>220.4</u>	<u>190.4</u>	<u>162.6</u>	<u>136.4</u>	<u>111.7</u>	<u>88.3</u>	<u>65.8</u>	<u>43.7</u>	<u>21.7</u>	
Total Liabilities		(256.4)	(91.4)	36.0	131.7	195.0	225.2	219.4	179.2	104.8	
Required Surplus	-	417.1	371.2	326.0	281.3	236.6	192.0	147.0	100.9	53.2	-
Free Surplus	<u>430.0</u>	<u>12.1</u>	<u>12.9</u>	<u>13.7</u>	<u>14.4</u>	<u>14.9</u>	<u>15.3</u>	<u>15.7</u>	<u>16.0</u>	<u>16.1</u>	<u>83.9</u>
Total Equity	<u>430.0</u>	<u>429.2</u>	<u>384.1</u>	<u>339.7</u>	<u>295.6</u>	<u>251.5</u>	<u>207.4</u>	<u>162.8</u>	<u>117.0</u>	<u>69.4</u>	<u>83.9</u>
Total Liabilities & Equity	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9

10 year term measured under composite margin – baseline (actual = expected)

10 year term measured under o	composite margin -	<pre>- baseline (actual = expected)</pre>
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Composite margin approach	<u>n in measur</u>	ement-Exam	nple 1B								
Income:	<u>Year 0</u>	Year 1	<u>Year 2</u>	Year 3	Year 4	<u>Year 5</u>	<u>Year 6</u>	Year 7	<u>Year 8</u>	Year 9	<u>Year 10</u>
Premium revenue		415.0	377.5	343.2	315.5	289.9	266.4	247.3	234.6	222.4	210.7
Net Investment income		<u>4.3</u>	<u>30.2</u>	35.6	<u>39.2</u>	40.9	<u>40.8</u>	39.0	<u>35.3</u>	29.5	21.5
Total gross income		419.3	407.7	378.8	354.7	330.8	307.2	286.3	269.9	251.9	232.2
Benefits & Expenses:											
Benefits		96.0	122.2	138.9	153.3	168.8	184.9	206.0	228.8	250.3	267.3
Expenses		773.3	46.2	42.0	38.6	35.5	32.6	30.2	28.7	27.2	25.8
Change in reserves		<u>(476.9)</u>	<u>195.1</u>	155.2	<u>122.0</u>	87.9	<u>53.7</u>	16.7	<u>(18.0)</u>	(52.5)	(83.1)
Total benefits & expense		392.4	363.5	336.1	313.8	292.2	271.1	252.9	239.4	225.1	209.9
Net income		26.9	44.3	42.7	40.8	38.6	36.1	33.4	30.4	26.8	22.3
FIT		<u>9.4</u>	<u>15.5</u>	15.0	<u>14.3</u>	13.5	<u>12.6</u>	11.7	<u>10.7</u>	9.4	7.8
Post-tax net income		17.5	28.8	27.8	26.5	25.1	23.4	21.7	19.8	17.4	14.5
Dividends		18.3	73.8	72.2	70.6	69.2	67.6	66.3	65.6	65.0	
Post Tax ROE (Total Avg. Equity)		4.1%	7.1%	7.7%	8.3%	9.2%	10.2%	11.7%	14.1%	18.7%	18.9%

Composite margin - FASB view	v-Example ?	<u>IC</u>			I	8				,	
	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	Year 4	<u>Year 5</u>	<u>Year 6</u>	Year 7	Year 8	<u>Year 9</u>	<u>Year 10</u>
Assets:											
Invested assets	<u>430.0</u>	<u>172.7</u>	<u>292.7</u>	<u>375.7</u>	<u>427.4</u>	<u>446.5</u>	<u>432.6</u>	<u>382.2</u>	<u>296.2</u>	<u>174.2</u>	<u>83.9</u>
Total Assets	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9
Liabilities:											
PV of future benefits	1,384.3	1,350.6	1,289.1	1,208.2	1,109.3	990.4	850.1	682.4	484.3	255.8	
PV of expenses	1,026.3	264.4	228.1	194.5	162.9	133.2	105.2	78.3	51.8	25.8	
PV of future gross premiums	2,484.3	2,162.4	1,865.3	1,590.5	1,332.4	1,089.4	860.1	640.3	424.0	210.7	
Margins	<u>73.7</u>	<u>65.8</u>	<u>58.0</u>	<u>50.5</u>	<u>43.2</u>	<u>36.1</u>	<u>29.1</u>	<u>22.0</u>	<u>14.8</u>	<u>7.5</u>	
PV of liabilities	0	(481.6)	(290.0)	(137.3)	(17.0)	70.3	124.3	142.4	127.0	78.3	(0.0)
Deferred Tax Liability		<u>222.1</u>	<u>193.3</u>	<u>166.3</u>	<u>140.7</u>	<u>116.2</u>	<u>92.7</u>	<u>69.7</u>	<u>46.7</u>	<u>23.4</u>	
Total Liabilities		(259.5)	(96.8)	29.0	123.7	186.5	217.0	212.2	173.6	101.7	
Required Surplus	-	417.1	371.2	326.0	281.3	236.6	192.0	147.0	100.9	53.2	-
Free Surplus	<u>430.0</u>	<u>15.2</u>	<u>18.3</u>	<u>20.7</u>	<u>22.4</u>	<u>23.4</u>	<u>23.5</u>	<u>23.0</u>	<u>21.6</u>	<u>19.3</u>	<u>83.9</u>
Total Equity	<u>430.0</u>	<u>432.2</u>	<u>389.5</u>	<u>346.7</u>	<u>303.7</u>	<u>259.9</u>	<u>215.6</u>	<u>170.0</u>	<u>122.5</u>	<u>72.5</u>	<u>83.9</u>
Total Liabilities & Equity	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9

10 year term measured under composite margin – baseline (actual = expected)

Composite margin - FASB view-Example 1C

Income:	<u>Year 0</u>	Year 1	Year 2	Year 3	Year 4	<u>Year 5</u>	Year 6	Year 7	Year 8	Year 9	<u>Year 10</u>
Premium revenue		415.0	377.5	343.2	315.5	289.9	266.4	247.3	234.6	222.4	210.7
Net Investment income		<u>4.3</u>	<u>30.2</u>	35.6	<u>39.2</u>	40.9	<u>40.8</u>	39.0	<u>35.3</u>	29.5	21.5
Total gross income		419.3	407.7	378.8	354.7	330.8	307.2	286.3	269.9	251.9	232.2
Benefits & Expenses:											
Benefits		96.0	122.2	138.9	153.3	168.8	184.9	206.0	228.8	250.3	267.3
Expenses		773.3	46.2	42.0	38.6	35.5	32.6	30.2	28.7	27.2	25.8
Change in reserves		<u>(481.6)</u>	<u>191.6</u>	152.7	<u>120.4</u>	87.3	<u>54.0</u>	18.1	<u>(15.4)</u>	(48.7)	(78.3)
Total benefits & expense		387.7	360.0	333.6	312.3	291.6	271.5	254.3	242.1	228.8	214.8
Net income		31.6	47.8	45.2	42.4	39.2	35.7	32.0	27.8	23.1	17.4
FIT		<u>11.1</u>	<u>16.7</u>	15.8	<u>14.8</u>	13.7	<u>12.5</u>	11.2	<u>9.7</u>	8.1	6.1
Post-tax net income		20.5	31.1	29.4	27.6	25.5	23.2	20.8	18.1	15.0	11.3
Dividends		18.3	73.8	72.2	70.6	69.2	67.6	66.3	65.6	65.0	
Post Tax ROE (Total Avg. Equity)		4.8%	7.6%	8.0%	8.5%	9.0%	9.8%	10.8%	12.4%	15.4%	14.5%

10 year term measured under risk/residual margin – baseline (actual = expected)													
Risk/residual margin in measur	ement-Exa	mple 1D											
	<u>Year 0</u>	Year 1	<u>Year 2</u>	Year 3	Year 4	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	Year 8	<u>Year 9</u>	<u>Year 10</u>		
Assets:													
Invested assets	<u>430.0</u>	<u>172.7</u>	<u>292.7</u>	<u>375.7</u>	<u>427.4</u>	<u>446.5</u>	<u>432.6</u>	<u>382.2</u>	<u>296.2</u>	<u>174.2</u>	<u>83.9</u>		
Total Assets	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9		
Liabilities:													
PV of future benefits	1,384.3	1,350.6	1,289.1	1,208.2	1,109.3	990.4	850.1	682.4	484.3	255.8			
PV of expenses	1,026.3	264.4	228.1	194.5	162.9	133.2	105.2	78.3	51.8	25.8			
PV of future gross premiums	2,484.3	2,162.4	1,865.3	1,590.5	1,332.4	1,089.4	860.1	640.3	424.0	210.7			
Risk margin	49.3	42.7	36.7	31.0	25.7	20.7	15.9	11.3	6.7	2.2			
Residual margin	<u>24.4</u>	<u>23.8</u>	<u>22.7</u>	<u>21.3</u>	<u>19.6</u>	<u>17.5</u>	<u>15.0</u>	<u>12.0</u>	<u>8.5</u>	<u>4.5</u>			
Total margins	73.7	66.5	59.4	52.3	45.3	38.1	30.9	23.3	15.3	6.7			
PV of liabilities	(0.0)	(480.8)	(288.7)	(135.5)	(15.0)	72.4	126.1	143.7	127.4	77.6	-		
Deferred Tax Liability		<u>221.8</u>	<u>192.8</u>	<u>165.7</u>	<u>140.0</u>	<u>115.5</u>	<u>92.1</u>	<u>69.3</u>	<u>46.5</u>	<u>23.6</u>			
Total Liabilities		(259.0)	(95.9)	30.1	125.0	187.9	218.2	213.0	173.9	101.2	-		
Required Surplus Free Surplus	- 430.0	417.1 <u>14.6</u>	371.2 <u>17.4</u>	326.0 <u>19.5</u>	281.3 21.0	236.6 22.0	192.0 22.3	147.0 22.2	100.9 3	53.2 <u>19.7</u>	- 83.9		
Total Equity	<u>430.0</u>	<u>431.7</u>	<u>388.6</u>	<u>345.5</u>	<u>302.3</u>	<u>258.6</u>	<u>214.4</u>	<u>169.2</u>	<u>122.2</u>	<u>73.0</u>	<u>83.9</u>		
Total Liabilities & Equity	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9		

10 year term measured under risk/residual	margin – baseline (actual = expected)
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Risk/residual margin approa	<u>ch in meas</u>	urement-Exa	ample 1D								
Income:	<u>Year 0</u>	Year 1	Year 2	Year 3	Year 4	<u>Year 5</u>	<u>Year 6</u>	Year 7	<u>Year 8</u>	Year 9	<u>Year 10</u>
Premium revenue		415.0	377.5	343.2	315.5	289.9	266.4	247.3	234.6	222.4	210.7
Net Investment income		<u>4.3</u>	<u>30.2</u>	35.6	<u>39.2</u>	40.9	<u>40.8</u>	39.0	<u>35.3</u>	29.5	21.5
Total gross income		419.3	407.7	378.8	354.7	330.8	307.2	286.3	269.9	251.9	232.2
Benefits & Expenses:											
Benefits		96.0	122.2	138.9	153.3	168.8	184.9	206.0	228.8	250.3	267.3
Expenses		773.3	46.2	42.0	38.6	35.5	32.6	30.2	28.7	27.2	25.8
Change in reserves		<u>(480.8)</u>	<u>192.2</u>	153.1	<u>120.6</u>	87.3	<u>53.8</u>	17.6	<u>(16.3)</u>	(49.9)	(77.6)
Total benefits & expense		388.5	360.6	334.0	312.5	291.6	271.3	253.8	241.2	227.6	215.5
Net income		30.8	47.2	44.8	42.2	39.2	36.0	32.5	28.7	24.2	16.7
FIT		<u>10.8</u>	<u>16.5</u>	15.7	<u>14.8</u>	13.7	<u>12.6</u>	11.4	<u>10.0</u>	8.5	5.9
Post-tax net income		20.0	30.7	29.1	27.4	25.5	23.4	21.1	18.6	15.8	10.9
Dividends		18.3	73.8	72.2	70.6	69.2	67.6	66.3	65.6	65.0	
Post Tax ROE (Total Avg. Equity)		4.6%	7.5%	7.9%	8.5%	9.1%	9.9%	11.0%	12.8%	16.1%	13.8%

10 y	ear ter	m measured	l under	SFAS	60 -	5 th year	loss
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SFAS No. 60 Approach-Exa	mple 2A										
	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets:											
Invested assets	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5
DAC		<u>628.9</u>	542.5	462.6	387.5	245.4	<u>197.5</u>	<u>144.6</u>	<u>94.2</u>	<u>46.1</u>	0.0
Total Assets		801.6	835.2	838.3	814.9	739.5	668.3	554.0	406.5	225.6	78.5
Liabilities:											
PV of liabilities		152.9	262.1	337.9	385.0	371.8	367.4	322.5	245.6	137.0	0.0
Deferred Tax Liability		<u>220.1</u>	<u>189.9</u>	<u>161.9</u>	<u>135.6</u>	<u>85.9</u>	<u>69.1</u>	50.6	33.0	<u>16.1</u>	0.0
Total Liabilities		373.0	452.0	499.8	520.6	457.7	436.5	373.1	278.6	153.1	0.0
Required Surplus	0.0	417.1	371.2	326.0	281.3	190.1	157.7	120.0	82.0	43.4	0.0
Free Surplus	430.0	<u>11.5</u>	12.0	<u>12.5</u>	<u>13.0</u>	<u>91.6</u>	<u>74.1</u>	60.9	45.9	<u>29.1</u>	<u>78.5</u>
Total Equity	430.0	428.6	383.2	338.5	294.3	281.7	231.8	180.9	128.0	72.5	78.5
Total Liabilities & Equity	430.0	801.6	835.2	838.3	814.9	739.5	668.3	554.0	406.5	225.6	78.5
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5					
Gross premium test:											
PV of Death benefits						1,023.7					
PV expenses						125.0					
PV Gross premium						1,022.3					
Gross premium reserve					-	126.4					
Net liability-unlocked						79.2					
Deficiency					-	47.3					
,											

SFAS No. 60 Approach-Example 2A										
Income:	<u>Year 1</u>	Year 2	Year 3	Year 4	Year 5	<u>Year 6</u>	Year 7	Year 8	Year 9	<u>Year 10</u>
Premium revenue	415.0	377.5	343.2	315.5	289.9	246.0	233.4	221.2	209.7	198.7
Investment income	<u>4.3</u>	<u>30.2</u>	<u>35.6</u>	<u>39.2</u>	<u>40.9</u>	<u>42.6</u>	<u>40.5</u>	<u>36.2</u>	<u>29.8</u>	<u>21.2</u>
Total gross income	419.3	407.7	378.8	354.7	330.8	288.6	273.9	257.5	239.5	219.9
Benefits & Expenses:										
Benefits	96.0	122.2	138.9	153.3	185.7	187.8	213.8	237.4	259.7	277.2
Expenses	773.3	46.2	42.0	38.6	35.5	30.1	28.5	27.1	25.6	24.3
Change in DAC	(628.9)	86.4	79.9	75.1	142.1	48.0	52.8	50.4	48.1	46.1
Change in reserves	152.9	109.2	75.8	47.1	(13.2)	(4.4)	(44.9)	(76.9)	<u>(108.6)</u>	(137.0)
Total benefits & expense	393.3	364.0	336.6	314.1	350.1	261.5	250.2	238.0	224.8	210.6
Pre-tax net income	26.0	43.7	42.2	40.6	-19.3	27.2	23.7	19.5	14.7	9.3
FIT	<u>9.1</u>	<u>15.3</u>	<u>14.8</u>	<u>14.2</u>	<u>-6.7</u>	<u>9.5</u>	<u>8.3</u>	<u>6.8</u>	<u>5.1</u>	<u>3.3</u>
Post-tax net income	16.9	28.4	27.5	26.4	-12.5	17.7	15.4	12.7	9.5	6.0
Dividends	18.3	73.8	72.2	70.6	-	67.6	66.3	65.6	65.0	-
Post-tax ROE	3.9%	7.0%	7.6%	8.3%	-4.3%	6.9%	7.5%	8.2%	9.5%	8.0%

10 year term measured under SFAS 60 – 5th year loss

Composite margin in measuremer	nt-Example 2B										
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	<u>Year 6</u>	Year 7	Year 8	Year 9	<u>Year 10</u>
Assets:											
Invested assets	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5
Total Assets	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5
Liabilities:											
PV of future benefits	1,384.3	1,350.6	1,289.1	1,208.2	1,109.3	1,023.7	881.9	707.9	502.3	265.3	
PV of expenses	1,026.3	264.4	228.1	194.5	162.9	125.0	99.2	73.8	48.9	24.3	-
PV of future gross premiums	2,484.3	2,162.4	1,865.3	1,590.5	1,332.4	1,022.3	811.2	603.8	399.8	198.7	
Margins	73.7	70.5	66.2	61.2	55.5	50.2	42.8	34.1	24.1	12.6	
PV of liabilities	-	(476.8)	(281.8)	(126.6)	(4.6)	176.6	212.8	212.0	175.5	103.5	-
Deferred Tax Liability		220.4	190.4	162.6	136.4	68.3	54.1	38.7	24.5	11.7	
Total Liability		(256.4)	(91.4)	36.0	131.7	244.9	266.9	250.7	200.0	115.2	-
Required Surplus	-	417.1	371.2	326.0	281.3	236.6	192.0	147.0	100.9	53.2	-
Free Surplus	430.0	12.1	12.9	13.7	14.4	12.5	<u>11.9</u>	<u>11.7</u>	<u>11.4</u>	<u>11.0</u>	78.5
Total Equity	430.0	429.1	384.2	339.7	295.6	249.1	<u>204.0</u>	<u>158.7</u>	<u>112.3</u>	<u>64.3</u>	78.5
Total Liabilities & Equity	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5

Composite margin in measurement- E	xample 2B									
Income:	<u>Year 1</u>	Year 2	Year 3	Year 4	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
Premium revenue	415.0	377.5	343.2	315.5	289.9	246.0	233.4	221.2	209.7	198.7
Net Investment income	4.3	30.2	35.6	39.2	40.9	42.6	40.5	36.2	29.8	21.2
Total gross income	419.3	407.7	378.8	354.7	330.8	288.6	273.9	257.5	239.5	219.9
Benefits & Expenses:										
Benefits	96.0	122.2	138.9	153.3	185.7	187.8	213.8	237.4	259.7	277.2
Expenses	773.3	46.2	42.0	38.6	35.5	30.1	28.5	27.1	25.6	24.3
Change in reserves	<u>(476.8)</u>	195.1	155.2	121.9	<u>181.2</u>	36.2	(0.8)	<u>(36.5)</u>	<u>(72.0)</u>	<u>(103.5)</u>
expense	392.5	363.5	336.1	313.8	402.4	254.1	241.5	227.9	213.4	198.0
Pre-tax net income	26.9	44.3	42.7	40.8	(71.6)	34.5	32.4	29.5	26.1	21.9
FIT	9.4	15.5	14.9	14.3	(25.0)	12.1	11.3	10.3	9.1	7.7
Post-tax net income	17.5	28.8	27.8	26.5	(46.5)	22.4	21.0	19.2	17.0	14.3
Dividends	18.3	73.8	72.2	70.6	-	67.6	66.3	65.6	65.0	-
Post-tax ROE	4.1%	7.1%	7.7%	8.3%	-17.1%	9.9%	11.6%	14.2%	19.2%	20.0%

Composite margin FASB view-Exa	<u>mple 2C</u>										
	Year 0	Year 1	<u>Year 2</u>	Year 3	Year 4	Year 5	<u>Year 6</u>	<u>Year 7</u>	Year 8	Year 9	<u>Year 10</u>
Assets:											
Invested assets	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5
Total Assets	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5
Liabilities:											
PV of future benefits	1,384.3	1,350.6	1,289.1	1,208.2	1,109.3	1,023.7	881.9	707.9	502.3	265.3	
PV of expenses	1,026.3	264.4	228.1	194.5	162.9	125.0	99.2	73.8	48.9	24.3	-
PV of future gross premiums	2,484.3	2,162.4	1,865.3	1,590.5	1,332.4	1,022.3	811.2	603.8	399.8	198.7	
Margins	73.7	65.8	58.0	50.5	43.2	35.7	<u>28.9</u>	<u>21.9</u>	<u>14.8</u>	<u>7.4</u>	
PV of liabilities	-	(481.6)	(290.1)	(137.3)	(17.0)	162.1	198.8	199.8	166.2	98.3	-
Deferred Tax Liability		222.1	193.3	166.3	140.7	73.4	<u>59.0</u>	<u>42.9</u>	<u>27.8</u>	<u>13.5</u>	
Total Liability		(259.5)	(96.8)	29.0	123.7	235.5	257.8	242.7	194.0	111.8	-
Required Surplus	-	417.1	371.2	326.0	281.3	236.6	192.0	147.0	100.9	53.2	-
Free Surplus	430.0	15.2	18.3	20.7	22.4	22.0	<u>21.0</u>	<u>19.6</u>	<u>17.4</u>	<u>14.4</u>	78.5
Total Equity	430.0	432.2	389.5	346.7	303.7	258.5	<u>213.0</u>	<u>166.6</u>	<u>118.4</u>	<u>67.7</u>	78.5
Total Liabilities & Equity	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5

Composite margin FASB view- Exa	mple 2C									
Income:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	<u>Year 10</u>
Premium revenue	415.0	377.5	343.2	315.5	289.9	246.0	233.4	221.2	209.7	198.7
Net Investment income	4.3	30.2	35.6	39.2	40.9	42.6	40.5	36.2	29.8	21.2
Total gross income	419.3	407.7	378.8	354.7	330.8	288.6	273.9	257.5	239.5	219.9
Benefits & Expenses:										
Benefits	96.0	122.2	138.9	153.3	185.7	187.8	213.8	237.4	259.7	277.2
Expenses	773.3	46.2	42.0	38.6	35.5	30.1	28.5	27.1	25.6	24.3
Change in reserves	<u>(481.6)</u>	191.5	152.7	120.3	<u>179.1</u>	36.8	0.9	<u>(33.6)</u>	<u>(67.9)</u>	<u>(98.3)</u>
expense	387.7	359.9	333.6	312.2	400.2	254.7	243.2	230.8	217.5	203.2
Pre-tax net income	31.6	47.8	45.2	42.4	(69.4)	34.0	30.7	26.6	22.0	16.7
FIT	<u>11.1</u>	16.7	15.8	14.8	<u>(24.3)</u>	11.9	10.7	9.3	<u>7.7</u>	<u>5.9</u>
Post-tax net income	20.5	31.1	29.4	27.6	(45.1)	22.1	19.9	17.3	14.3	10.9
Dividends	18.3	73.8	72.2	70.6	-	67.6	66.3	65.6	65.0	-
Post-tax ROE	4.8%	7.6%	8.0%	8.5%	-16.1%	9.4%	10.5%	12.1%	15.4%	14.9%

10 year term measured under risk/residual margin – 5th year loss

Risk/residual margin in measureme	nt-Example 2D										
	<u>Year 0</u>	Year 1	Year 2	Year 3	Year 4	Year 5	<u>Year 6</u>	Year 7	Year 8	Year 9	<u>Year 10</u>
Assets:											
Invested assets	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5
Total Assets	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5
Liabilities:											
PV of future benefits	1,384.3	1,350.6	1,289.1	1,208.2	1,109.3	1,023.7	881.9	707.9	502.3	265.3	
PV of expenses	1,026.3	264.4	228.1	194.5	162.9	125.0	99.2	73.8	48.9	24.3	-
PV of future gross premiums	2,484.3	2,162.4	1,865.3	1,590.5	1,332.4	1,022.3	811.2	603.8	399.8	198.7	
risk margin	49.3	42.7	36.7	31.0	25.7	19.4	15.0	10.6	6.3	2.1	
residual margin	24.4	23.8	22.7	21.3	19.6	16.1	14.1	11.4	8.1	4.3	
Total margins	73.7	66.5	59.4	52.3	45.3	35.6	29.2	22.0	14.4	6.4	
PV of liabilities	0.0	(480.8)	(288.7)	(135.5)	(14.9)	162.0	199.1	199.9	165.8	97.2	-
Deferred Tax Liability	0	221.8	192.8	165.7	140.0	73.4	<u>58.9</u>	<u>42.9</u>	<u>27.9</u>	<u>13.9</u>	
Total Liability		(259.0)	(95.9)	30.2	125.0	235.4	258.0	242.8	193.8	111.2	-
Required Surplus	-	417.1	371.2	326.0	281.3	236.6	192.0	147.0	100.9	53.2	-
	100.0			10 -				10.0	1 - 0	. – .	
Free Surplus	430.0	14.6	17.4	<u> </u>	21.1	22.0	<u>20.8</u>	<u>19.6</u>	<u>17.6</u>	<u>15.1</u>	78.5
Total Equity	430.0	431.7	388.6	345.5	302.3	258.6	<u>212.8</u>	<u>166.6</u>	<u>118.6</u>	<u>68.4</u>	78.5
Total Liabilities & Equity	430.0	172.7	292.7	375.7	427.4	494.0	470.9	409.4	312.3	179.5	78.5

Risk/residual margin in measure	ment-Example 2D	<u>)</u>								
Income:	<u>Year 1</u>	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	<u>Year 9</u>	<u>Year 10</u>
Premium revenue	415.0	377.5	343.2	315.5	289.9	246.0	233.4	221.2	209.7	198.7
Net Investment income	4.3	30.2	35.6	39.2	40.9	42.6	40.5	36.2	29.8	21.2
Total gross income	419.3	407.7	378.8	354.7	330.8	288.6	273.9	257.5	239.5	219.9
Benefits & Expenses:										
Benefits	96.0	122.2	138.9	153.3	185.7	187.8	213.8	237.4	259.7	277.2
Expenses	773.3	46.2	42.0	38.6	35.5	30.1	28.5	27.1	25.6	24.3
Change in reserves	<u>(480.8)</u>	192.1	153.2	120.6	<u>176.9</u>	37.1	0.8	<u>(34.1)</u>	<u>(68.6)</u>	<u>(97.2)</u>
expense	388.5	360.5	334.1	312.5	398.1	255.0	243.1	230.4	216.7	204.2
Pre-tax net income	30.8	47.2	44.8	42.2	(67.3)	33.6	30.8	27.1	22.7	15.7
FIT	<u>10.8</u>	16.5	15.7	14.8	<u>(23.5)</u>	11.8	10.8	9.5	<u>8.0</u>	<u>5.5</u>
Post-tax net income	20.0	30.7	29.1	27.4	(43.7)	21.9	20.0	17.6	14.8	10.2
Dividends	18.3	73.8	72.2	70.6	-	67.6	66.3	65.6	65.0	-
Post-tax ROE	4.6%	7.5%	7.9%	8.5%	-15.6%	9.3%	10.6%	12.3%	15.8%	13.9%

10 year term measured under risk/residual margin – 5th year loss

10 year term measured under risk/residual margin – loss at issue											
Risk/residual margin Example	<u>3A</u> Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets:	10010	<u>1001 1</u>	10012	<u>10010</u>	<u>1001 1</u>	<u>10010</u>	10010	<u>10017</u>	<u>10010</u>	<u>10010</u>	<u>1001 10</u>
Invested assets	<u>430.0</u>	<u>172.7</u>	<u>292.7</u>	<u>375.7</u>	<u>427.4</u>	<u>446.5</u>	<u>432.6</u>	<u>382.2</u>	<u>296.2</u>	<u>174.2</u>	<u>83.9</u>
Total Assets	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9
Liabilities:											
PV of future benefits	1,384.3	1,350.6	1,289.1	1,208.2	1,109.3	990.4	850.1	682.4	484.3	255.8	
PV of expenses	1,026.3	264.4	228.1	194.5	162.9	133.2	105.2	78.3	51.8	25.8	
PV of future gross premiums	2,484.3	2,162.4	1,865.3	1,590.5	1,332.4	1,089.4	860.1	640.3	424.0	210.7	
Risk margin Residual margin	98.6	85.4 	73.3	62.0	51.4 	41.4	31.8 	22.6	13.5 	4.5	
Total margins	<u>98.6</u>	<u>85.4</u>	<u>73.3</u>	<u>62.0</u>	<u>51.4</u>	<u>41.4</u>	<u>31.8</u>	<u>22.6</u>	<u>13.5</u>	<u>4.5</u>	
PV of liabilities	24.8	(461.9)	(274.8)	(125.9)	(8.8)	75.6	127.0	143.0	125.6	75.3	(0.0)
Deferred Tax Liability		<u>215.2</u>	<u>187.9</u>	<u>162.3</u>	<u>137.8</u>	<u>114.4</u>	<u>91.8</u>	<u>69.6</u>	<u>47.1</u>	<u>24.4</u>	
Total Liabilities		(246.8)	(86.9)	36.5	129.0	190.0	218.8	212.5	172.8	99.7	
Required Surplus	-	417.1	371.2	326.0	281.3	236.6	192.0	147.0	100.9	53.2	-
Free Surplus	<u>405.2</u>	2.4	8.3	13.2	<u> </u>	<u> 19.9</u>	21.8	22.7	22.5	21.2	83.9
Total Equity	<u>405.2</u>	<u>419.5</u>	<u>379.6</u>	<u>339.2</u>	<u>298.4</u>	<u>256.5</u>	<u>213.8</u>	<u>169.7</u>	<u>123.4</u>	<u>74.5</u>	<u>83.9</u>
Total Liabilities & Equity	430.0	172.7	292.7	375.7	427.4	446.5	432.6	382.2	296.2	174.2	83.9

10 year term measured under risk/residual margin – loss at issue

Risk/residual margin approach Example 3A

Income:	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	<u>Year 6</u>	Year 7	<u>Year 8</u>	Year 9	<u>Year 10</u>
Premium revenue		415.0	377.5	343.2	315.5	289.9	266.4	247.3	234.6	222.4	210.7
Net Investment income		<u>4.3</u>	<u>30.2</u>	35.6	<u>39.2</u>	40.9	<u>40.8</u>	39.0	<u>35.3</u>	29.5	21.5
Total gross income		419.3	407.7	378.8	354.7	330.8	307.2	286.3	269.9	251.9	232.2
Benefits & Expenses:											
Benefits		96.0	122.2	138.9	153.3	168.8	184.9	206.0	228.8	250.3	267.3
Expenses		773.3	46.2	42.0	38.6	35.5	32.6	30.2	28.7	27.2	25.8
Change in reserves		<u>(461.9)</u>	<u>187.2</u>	148.9	<u>117.0</u>	84.4	<u>51.5</u>	15.9	<u>(17.4)</u>	(50.3)	(75.3)
Total benefits & expense		407.4	355.6	329.8	308.9	288.7	269.0	252.1	240.1	227.2	217.8
Net income		12.0	52.1	49.0	45.7	42.1	38.2	34.2	29.7	24.7	14.4
FIT		4.2	18.3	17.2	16.0	14.7	13.4	12.0	10.4	8.6	5.1
Post-tax net income		7.8	33.9	31.9	29.7	27.4	24.9	22.2	19.3	16.1	9.4
Dividends		18.3	73.8	72.2	70.6	69.2	67.6	66.3	65.6	65.0	
Post Tax ROE (Total Avg. Equity)		1.8%	8.5%	8.9%	9.3%	9.9%	10.6%	11.6%	13.2%	16.2%	11.9%