



Project	Insurance contracts
Topic	Composite Margin – Profit Realization

Purpose of this paper

1. This agenda paper provides an analysis of the realization of profit for the composite margin.
2. The boards should read this agenda paper in concert with the other agenda papers provided on the composite margin and the series of papers provided on the risk adjustment in order to compare and contrast the approaches.
3. The staff provided at agenda paper 3E/68E an overview of the composite margin and a high level summary of the feedback received to date from the following interested parties:
 - (a) Comment letter respondents to the FASB's DP
 - (b) North American field test participants for the ED
 - (c) Recent outreach activities with users conducted by the FASB staff
4. The staff provided a discussion of the conceptual merits of the composite margin at agenda paper 3G/68G.
5. Based upon the analysis provided in this series of papers, the FASB staff will recommend that the boards decide to apply a single margin approach to the insurance contract measurement model as part of this agenda paper.
6. This paper does not discuss the accretion of interest. If the boards were to choose a single margin approach as recommended by the FASB staff, we will need to return to the boards later with our recommendations.

This paper has been prepared by the technical staff of the IFRS Foundation and the FASB for discussion at a public meeting of the FASB or the IASB.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the FASB or the IASB.

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The tentative decisions made by the FASB or the IASB at public meetings are reported in FASB *Action Alert* or in IASB *Update*. Official pronouncements of the FASB or the IASB are published only after each board has completed its full due process, including appropriate public consultation and formal voting procedures.

7. This paper does not address the level at which a single margin should be measured (eg. portfolio, cohort, contract). If the boards were to choose a single margin approach as recommended by the FASB staff, we will need to return to the boards later with our recommendations.

Structure of this paper

8. The remainder of this paper is structured as follows:
 - (a) Summary of staff recommendations
 - (b) Background
 - (i) Summary of the proposals in the FASB's discussion paper *Preliminary Views on Insurance Contracts (DP)*
 - (ii) Basis for decisions
 - (c) Overview of comments received on the DP specific to the formula for the composite margin
 - (d) Staff analysis
 - (i) Recent board discussions about the composite margin
 - (ii) Results of the boards' inquiry into the formula of the composite margin
 - (iii) Potential solution to the composite margin
 - (iv) Comparability
 - (v) Reducing complexity
 - (e) Staff recommendations

Summary of Staff recommendation

9. The FASB staff recommend the following:
 - (a) An insurance contract measurement model should use a single margin approach that recognizes profit as an insurer is released from its exposure to risk continuously over time.
 - (b) An insurer should recognize profit from the single margin as it satisfies its performance obligation to stand ready to compensate the policyholder in the

event of an occurrence of a specified uncertain future event that adversely affects that policyholder.

- (c) An insurer may satisfy a portion of its performance obligation as it is released from exposure to risk evidenced by a reduction in the variability of cash outflows.
- (d) An insurer is released from its exposure to risk in one of the following ways:
 - (i) If the variability of the cash flows of a specified uncertain future event is primarily due to timing of that event, an insurer is released from risk through the passage of time (ie straight-line).
 - (ii) If the variability of the cash flows of a specified uncertain future event is primarily due to the frequency and severity of that event, an insurer is released from risk as variability in the cash flows is reduced over time.
- (e) If the variability of the cash flows is primarily due to the frequency and severity of an unspecified event, an insurer should calculate a baseline ratio of actual claims reported (frequency x severity) to the total expected cash outflows each reporting period.
- (f) An insurer should consider specific facts and circumstances to qualitatively determine how a reduction in the variability of cash flows would adjust the calculated baseline ratio (calculated in (e) above) to determine the extent to which the insurer is released from risk.
- (g) A reduction in the variability of the cash flows such that an insurer is released from risk is a matter of judgment and should be based on facts and circumstances unique to the entity and the nature of the insurance contract. Different insurers may define a reduction in variability of cash flows in different ways, during different points in the life cycle of an insurance portfolio.
- (h) An insurer would apply an adjusted ratio to the single margin determined at initial recognition of the insurance contract. The resulting amount less the single margin recognized in earnings in previous periods would be recognized in current period earnings.

- (i) An insurer should disclose the methodology used to calculate the profit realization of the single margin.

Background

Summary of the proposals in the DP

10. The DP states that, at recognition, an insurer should measure an insurance contract initially as the sum of the following:
 - (a) The present value (unbiased estimate) of the expected cash outflows less cash inflows that are expected to arise as the insurer fulfils the insurance contract
 - (b) A composite margin that represents the excess of the expected present value of cash inflows over the expected present value of the cash outflows.
11. The DP also states that an insurer would determine the composite margin at a level that aggregates insurance contracts into a portfolio by similar date of recognition and coverage periods. Further, a portfolio would consist of contracts that are subject to broadly similar risks and managed together as a single pool. The boards will address the definition of a portfolio at a future meeting.
12. The DP establishes that the realization of the composite margin to profit or loss would occur over the life of the contract (eg coverage and claims handling period). The insurer should not remeasure the composite margin in subsequent periods.
13. The design of the composite margin reflects risk and uncertainty of the net cash flows implicitly through the realization of the margin rather than explicitly measuring a separate risk adjustment.
14. The DP states that an insurer would apply the following ratio to the composite margin determined at initial recognition of the insurance contract:
(Premiums allocated to date + Claims and benefits paid to date)
(Total expected premiums + Total expected claims and benefits)
The resulting amount less the composite margin recognized in earnings in previous periods constitutes the current period earnings.
15. The insurer allocates the total expected premiums over the coverage period in a systematic manner based upon the passage of time unless the pattern of expected

- claims and benefits indicates a more appropriate allocation method for reflecting the exposure from providing insurance coverage.
16. The insurer should update the four components included in the ratio each reporting period to reflect experience (backward-looking) and changes in estimates (forward-looking).
 17. The inclusion of premiums in the calculation of the ratio was intended to reflect the protection component of the contract while claims and benefits was intended to reflect the insurer's exposure to risk from uncertainties related to cash flows. Practically, the ratio would likely result in earlier recognition of earnings during the coverage period thus reflecting the insurer's exposure to risk during that period (ie providing coverage).

Overview of comments on the DP specific to the formula for the composite margin

18. The staff provided general comments on the composite margin as part of the overview at agenda paper 3E/68E. The comments provided here are specific to the formula provided in the DP and are more granular.
19. Respondents' comments regarding the period and method of recognition often inter-related because the method of recognition implicitly determines the period over which recognition of the composite margin occurs.
20. Some respondents agreed with the pattern of recognition in the DP. Those respondents generally agreed with the DP because the resultant pattern of recognition realized the majority of the profits during the coverage period as opposed to delaying recognition into the claims handling period.
21. Many respondents indicated the obligation to provide insurance coverage should be the primary driver of the recognition of the composite margin. Consequently, these respondents recommended limiting recognition of the composite margin to the coverage period because they believe the fulfilment of the performance obligation occurs when the insurer provides coverage. While these respondents acknowledge the potential uncertainty in final cash flows in the claims handling period, they argue that the change in the expected cash flows during that period better reflects the economics of the circumstances (eg charged to profit and loss without margin offsets).

22. Some respondents suggested that the boards not specify the period of recognition, but rather provide a principle (eg period of risk exposure). Respondents that preferred a principle to a formula primarily indicated that a single formula would not be economically relevant for every type of insurance contract. They commented that a single formula would potentially delay profit recognition beyond (a) the period in which the insurer provides all risk protection services, or (b) the period in which the insurer expends the majority of the costs and efforts to settle the claims. These respondents provided the example of a structured settlement. They argued that in a structured settlement, the insurer knows the final settlement amount however, payment may not occur until a later date. In this instance, those respondents believe that the insurer satisfied the performance obligation to provide insurance coverage once the parties agreed to the settlement terms. Consequently, delaying recognition of earnings by releasing the composite margin as benefits are paid would not appropriately reflect the economics of the transaction.
23. Some respondents suggested that the inclusion of premiums in the ratio to determine realization of the composite margin is not appropriate. These respondents do not believe the receipt and subsequent allocation of premiums is part of the performance obligation of an insurer nor does it represent risk exposure. An insurer's exposure to risk relates to the probability of insured events occurring, not the risk that a policyholder will fail to make premium payments. If the insurer does not receive a premium, it does not provide coverage and thus has no exposure. Consequently, the determination of profit should focus on the primary operating activity of assuming risk exposure by providing coverage.
24. Secondly, other respondents suggested the inclusion of premiums creates problems because some insurers view the allocation of premiums as arbitrary, especially for long-duration life business. This arbitrary allocation mechanism within the formula would likely produce results that users would not find particularly useful.
25. Because of the issues described above, respondents suggested revising the model to:
 - (a) Amortize the composite margin over the coverage period,
 - (b) Amortize the composite margin over the risk period,
 - (c) Provide a weighting to the inflows (premiums) and outflows (claims), or
 - (d) Create a principle for recognizing profit.

The staff explored each of the above suggestions as part of our broader examination of the realization patterns for various products.

Staff Analysis

Recent board discussions about the composite margin

26. At the February 2011 meeting the staff identified the following alternatives for possibly developing a principle for realization of the composite margin:
 - (a) Alternative 1—Provide only a principle for recognition, without illustrative examples using recommended or required ratio(s) for recognition; or
 - (b) Alternative 2—Provide a principle with illustrative examples using recommended or required ratio(s) for recognition.

27. Additionally in February 2011, the staff presented the boards with several alternatives to the formula provided in the DP to adjust the realization pattern of the composite margin to better reflect the protection component of the formula (premiums) and the exposure component of the formula (claims and benefits). The alternative formulas provided in February were as follows:
 - (a) *Formula 1*—Recognize the composite margin over the coverage and claims-handling period using the ratio in the DP.
 - (b) *Formula 2*—Recognize the composite margin over the coverage and claims-handling period using a ratio similar to the DP, but weight the protection component (premiums) and the risk exposure components (claims and benefits) to reflect the degree of risk in the contract relative to the premiums allocated.
 - (c) *Formula 3*— Recognize the composite margin over the coverage and claims-handling period using a ratio similar to the DP, but include a risk-based measurement for the outflows (claims and benefits) only to reflect the significance of risk in the contract.
 - (d) *Formula 4*— Recognize the composite margin based on the ratio of claims and benefits paid (or settled) to total expected claims and benefits

- (e) *Formula 5* – Recognize the composite margin based on the ratio of premiums allocated to total expected premiums
28. At the February meeting, the boards requested the staff to examine further these alternatives using data from actual contracts to determine if any one of them was more appropriate because the assumptions used were simplified and limited in capability. The staff reproduced our results of this request as part of Appendix A for the boards' examination. The appendix includes summarized results for each of the products examined. The staff can supply the boards with individual product results for each alternative upon request.
29. In addition to adjusting the individual components of the formula within the composite margin, the staff also examined allocating the premium over the claims handling period in addition to the coverage period as provided in the DP for all the formulas tested except when premiums are eliminated (eg. Formula 4). Overall, what the staff discovered through our examination of the results obtained was that most of the alternatives examined provided flawed results in one aspect or another. What follows is a description of the issues the staff encountered as part of our examination.

Results of the boards' inquiry into the formula for the composite margin

Coverage vs. claims handling period allocation of the premium

30. As one might expect, the differences between allocating the premium over the coverage period vs. allocating the premium over the claims handling period does not become pronounced until there is a significant difference in timing between the two periods (eg a property / casualty contract with 1 year of coverage paying a claim in year 12 in Appendix A). For this particular example, it was not immediately clear to the staff how recognizing approximately half of the profit in year one while recognizing the remainder of the profit when the claim is paid would provide useful information to the users of financial statements or how this methodology is conceptually sound. For instance, this methodology raises the question, why does the passage of time (in this case 1 year) earn the insurer approximately half of the profit while the other half cannot be earned until payment is made in another 11 years?
31. The staff found that spreading the allocation of premium over the claims handling period does not provide a better answer either. In this instance, half of the profit is

simply spread over 12 years while the remainder is recognized in the final year. This methodology caused the staff to question, why would only approximately half the profit be subject to release from risk as opposed to the entire amount? The staff highlights this particular example to illustrate that changing the allocation period of the premium from the coverage period to the claims handling period will not necessarily provide a useful answer to the questions raised by respondents to the DP. This issue perhaps demonstrates a broader problem with the formula for the composite margin provided in the DP and commented on by respondents. Why are premiums a component of the formula to realize profit on the composite margin? In addition to the issues discussed in the previous paragraphs, entities will need to determine an appropriate allocation of the premium. This allocation could ultimately be (a) arbitrary for some product types or (b) manipulated to influence the timing of profit within the formula. Including premiums, in effect, “front loads” (in the case of allocation over the coverage period) or “back loads” (in the case of allocation over the claims handling period) profit recognition. This loading becomes more pronounced as the coverage and claims handling period move farther apart. The staff explored options eliminating the use of the premium within the formula. This examination is discussed further below.

Formulas 2 and 3 – risk weighting

32. Formulas 2 and 3 attempt to adjust the realization of the composite margin by weighting the components of the margin to influence the realization relative to the differences in the risk profile of a particular contract¹. While the formulas presented are different, they accomplish the same goal. Formula 2 focuses on both components, providing each with a relative weighting, while Formula 3 solely focuses on the risk component of the formula to weight it for risk.
33. Although the results obtained appear to be intuitive (eg riskier products have a realization of profit weighted to the end of the contract), establishing the weightings (in the case of Formula 2) or the risk factor (in the case of Formula 3) are somewhat arbitrary. Additionally, the staff could not establish a theoretically sound way to link the weighting or the risk factors to the underlying cash flow distribution without

¹ While the staff realize the application of the model occurs at a portfolio level, the staff refer to “contract” here as we examined individual contracts for purposes of this exercise.

establishing a set of rules. For example, what does a risk weighting of 4 mean? What would 4 be relative to?

34. The staff determined this methodology demonstrated an additional issue with the composite margin formula described in the DP and any potential solutions:
- (a) Is it appropriate to attempt to depict two separate components, and
 - (b) Is it possible to measure those components separately

The staff explore below what the composite margin represents as part of our potential solutions offered.

Formula 4 – claims period

35. The staff found Formula 4 to be the most useful of all the alternatives examined. The formula appeared to be the most closely related to providing results that appear to recognize profit as the insurer is released from its obligation of fulfilling the contract. This formula is useful in that it solves the problem of an arbitrary split between the components of the formula as provided for in the DP and it alleviates the need to determine an allocation method for premiums.
36. The primary issue with this methodology is that it is based upon payment of claims and the staff realizes that in some instances the uncertainty in the cash flows could reduce throughout the claim life cycle² and could be minimal (eg the insurer and policyholder have agreed to a settlement amount) prior to the payment of the claim. Some would question why, in the instance of a known and agreed upon settlement, an insurer would need to wait to recognize profit when all indications point to the fact that satisfaction of the obligation occurred. The staff explored this methodology as part of our potential solutions.

Formula 5 – coverage period

37. In the staff's opinion, Formula 5 is not a viable option because we do not think it is representative of how an insurer earns profit over the life of a contract. The receipt and allocation of premium does not provide insight into the satisfaction of the insurer's obligation nor does it provide any indication of uncertainty or release from exposure

² For purposes of this discussion, the term "life cycle" refers to the period from the beginning of coverage to the end of the claims handling period.

to risk from providing coverage. Consequently, the staff provide no further analysis of this methodology.

Potential solution to the composite margin

38. Much of the discussion about the composite margin has focused on reconciling this approach with that of the risk adjustment. That is, the conversation has focused on attempting to explicitly measure, the risk component of the margin. The staff believe, and the examination of the realization patterns has proven, this is a flawed way of thinking about the composite margin. Any split between what was described in the DP as the protection component and the risk component is arbitrary at best. Even if the staff could devise a way to explicitly measure the risk component of the composite margin, the answer, when compared to the risk adjustment would not equal. This is because of the fundamentally different approach the boards took when establishing the one margin and the two margin approaches in the DP and ED respectively.
39. Although the two approaches set out to provide for a margin, one with an explicit measure of risk and the other with an implicit measure, the approaches start from a conceptually different place:
 - (a) In the IASB's ED, the effect of risk is regarded as representing the economic **burden** an insurer bears for the uncertainty in the insurance contract.
 - (b) In the FASB's DP, the effect of risk is regarded as representing the potential **profit** an insurer expects to earn for bearing the uncertainty associated with an insurance contract and this profit is at risk.
40. The staff therefore believe that the appropriate questions to ask are two-fold when it comes to the composite margin:
 - (a) Question 1 - Can a principle be established to recognize the profit at risk in a manner that reflects the insurer's release from risk?
 - (b) Question 2 - Do the boards believe that if the first question can be answered affirmatively, the results obtained satisfy the characteristics of a risk adjustment as provided in the IASB's ED?

Answering Question 1

41. To answer question 1, we must first begin with the fundamental difference in the approach taken by the FASB when establishing the single margin approach in the DP. The single margin approach established the notion that at initial recognition the risks associated with the uncertainty in net cash flows of an insurance contract would be considered in that contract's pricing (paragraph 69 of the DP). This notion would be consistent with the pricing of insurance products in today's active market. Premium rates are typically based upon an entity's experience by line of business while contemplating the risks covered and the variability of those risks, combined potentially with industry loss experience. The premium rates must:
- (a) Be high enough to pay contract benefits – the boards tentatively decided that an insurer should measure an insurance contract using an explicit, unbiased, estimate (that is, expected value or mean) of the future cash outflows.
 - (b) Cover selling, operating and maintenance expenses – the boards tentatively decided that all costs that an insurer will incur directly in fulfilling a portfolio of insurance contracts should be included in the cash flows used to determine the insurance liability. The boards also tentatively decided that cash flows included in the initial measurement of insurance contracts should include particular acquisition costs that relate to a portfolio of insurance contracts. Based on the boards' tentative decisions, costs not included in the measurement of the liability should be treated as period costs and therefore an insurer shall not accrue for or defer those costs.
 - (c) Provide for an adequate profit – the boards tentatively decided that an insurer should not recognize any gain at inception of an insurance contract. The profit in an insurance entity is at risk until fulfilment of the contracts. If the actual cash flows are less than the initial expected cash flows, the insurer will have additional profit; if the actual cash flows exceed the initial expected cash flows, the insurer will have less profit than initially expected and may have a loss.
42. The staff believe that by definition, the notion described in the preceding paragraphs establishes the single margin as a profit potential for the insurance contract and that profit in its entirety is at risk because of the uncertainty in the expected cash flows (ie. the actual cash flows will not be the same as the expected cash flows). The total profit is not fully determined until the risk within an insurance contract has diminished. This

is an important distinction because it establishes two primary concepts for examining the realization of profit:

- (a) The entire amount of potential profit is at risk and therefore any split between “components” of the formula established in the DP would be arbitrary and produce meaningless results, and
 - (b) The potential profit is subject to the uncertainty of the expected cash flows and therefore earning the profit over the coverage period only, appears to be counterintuitive.
43. With the above points established it is first important to determine the obligation that the insurer is satisfying in order to fulfil the contract. The definition of an insurance contract in the IASB’s ED and the FASB’s DP is as follows:
- (a) A contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.
44. It follows from the definition that the obligation an insurer enters into is an obligation to stand ready to compensate the policyholder in the event that the specified uncertain future event occurs and adversely affects the policyholder. The contract to perform exposes the insurer to risk because of the uncertainty of the future event. This uncertainty can take the form of timing, frequency, severity, or all three depending on the nature of the event insured. These factors, in turn, affect the variability of the expected cash flows.
45. Having established what the performance obligation is, it is next important to establish how the insurer might satisfy the obligation to earn the potential profit that is at risk under a single margin approach. If the insurer is exposed to risk due to the uncertainty of the specified future event, one could argue that an insurer earns its potential profit as it is released from this exposure to risk. By extension, if that uncertainty affects the variability of the expected cash flows, the variability of expected cash flows could be used as a proxy to measure when the insurer is released from that exposure. For example, a decrease in the variability of expected cash flows would represent a decrease in the exposure to risk. It is logical that the insurer would earn the potential profit in this manner otherwise there would be no argument against recognizing all profit on day one except for perhaps receipt of premium. However, as we have

- discussed above, the receipt of premium is not indicative of performance to satisfy the contract.
46. Therefore the staff recommend the following:
 - (a) An insurer should recognize profit from a single margin as it satisfies its performance obligation to stand ready to compensate the policyholder if a specified uncertain future event occurs. The occurrence of that event should adversely affect the policyholder.
 - (b) An insurer may satisfy its performance obligation as it is released from exposure to risk.
 47. The staff will ask the boards to vote on all recommendations together due to the inter-relationship of each of the recommendations. However, we provide our recommendations throughout for ease of reading.
 48. The natural question that extends from the above recommendation is how an insurer would be released from risk. For some insurance contracts, this question is simple in that the uncertainty in the expected cash flows is a function of time while the occurrence of the event is certain. For example, for a life insurance contract, the insurer agrees to pay a known amount upon death. The occurrence of the event in this example is not in question but rather the timing is uncertain. Therefore, for those contracts where the variability of the cash flows is a function of time (eg as the actual timing approaches the expected variability is reduced), the staff believe that the potential profit of the contract should be earned in a similar manner.
 49. For those contracts where the variability of the cash flows is a function of factors beyond time such as frequency and severity, the realization of profit should reflect an entity specific estimate of when the variability of the cash flows have been reduced to a level that would indicate the insurer has been released from risk. The staff believe this timing will be different based on the facts and circumstances of the particular policy and the insurers claims management practices.
 50. Given the different contracts discussed above, the staff recommend the following:
 - (a) An insurer is released from its exposure to risk in one of the following ways:
 - (i) If the variability of the cash flows of a specified uncertain future event is primarily due to timing of that event, an insurer

is released from risk through the passage of time (ie straight line).

- (ii) If the variability of the cash flows of a specified uncertain future event is primarily due to the frequency and severity of that event, an insurer is released from risk as variability in cash flows is reduced over time.

51. From an operational or practical standpoint, the insurer would need to calculate a baseline ratio each reporting period to determine quantitatively how much of the single margin (ie. profit) to recognize for those insurance contracts that cover specified uncertain future events where the uncertainty is primarily a function of the frequency and severity of the event. The staff believe that a baseline ratio should be calculated as the total actual claims reported to the total expected cash outflows. The staff believes this ratio serves as an appropriate starting point because this represents the beginning of the life cycle for the claim. It also represents the first opportunity that the insurer has to satisfy its obligation to stand ready to compensate the policyholder.
52. Thus, the staff recommend:
 - (a) If the variability of the cash flows is primarily due to the frequency and severity of an unspecified event, an insurer should calculate the ratio of actual claims reported (frequency x severity) to the total expected cash outflows each reporting period.
53. However, the staff believe it would be inappropriate to multiply the calculated baseline ratio by the single margin to determine the amount of profit recognition in all instances. The insurer should first assess if there is a reduction in the variability of cash flows because of the occurrence of those claims or changes in expectations of cash outflows. For example, there are instances in which the ultimate settlement of claims could be significantly different than the amount reported thereby indicating that recognition of less profit is warranted because the insurer is still exposed to risk for those claims due to the uncertainty in the ultimate cash outflows. Alternatively, a change in expectations of cash outflows could indicate additional clarity in the cash outflows warranting more profit recognition. These facts and circumstances require assessment to determine the variability remaining in the cash flows.
54. Given that the decisions above involve subjectivity and judgment, the staff believe that it is important to provide insurers with a set of facts and circumstances to consider

when determining if the variability of cash flows has been reduced at different points in the life cycle. In analyzing these facts and circumstances, the staff considered our discussions during outreach, common practices in industry today, and the conceptual framework.

55. Therefore the staff recommend the following:

(a) An insurer should consider specific facts and circumstances to qualitatively determine how a reduction in the variability of cash flows would adjust the calculated baseline ratio to determine the extent to which the insurer is released from risk. Those facts and circumstances should include the following:

- (i) The entity's relative experience with the types of contracts,
- (ii) The entity's past experience in estimating expected cash flows,
- (iii) Inherent difficulties in estimating expected cash flows,
- (iv) The relative homogeneity of the portfolio and within the portfolio, and
- (v) Past experience not being representative of future results.

56. The staff also believe that where an insurance contract is in the life cycle can impact the assessment of the facts and circumstances above because variability can be reduced as the contract moves through the cycle (uncertainty in the expectation of cash flows becomes clearer). The staff believe these points primarily focus on when claims are made, a settlement is agreed upon, or payment has occurred. As each entity is different with its own set of facts and circumstances, the staff do not believe a specific point in time should be prescribed but rather an insurer's claims development history throughout the life cycle should inform the insurer as to any reduction in variability.

57. Therefore the staff recommend the following:

(a) A reduction in the variability of the cash flows such that an insurer is released from risk is a matter of judgment and should be based upon facts and circumstances unique to the entity and the nature of the insurance contract. Different insurers may define a reduction in variability of cash flows in different ways, during different points in the life cycle of an insurance

portfolio. The points in the life cycle that should be included for examination and assessment include the following:

- (i) When an insurer incurs a claim but that claim has not yet been reported.
 - (ii) When a claim has been reported.
 - (iii) The point at which the parties to the contract have agreed upon a settlement amount.
 - (iv) The point at which the claim has been paid.
58. The above facts and circumstances coupled with a consideration of where the contract is in the life cycle would provide a basis for adjusting the baseline ratio for the variability in cash flows and thus recognizing profit as the insurer is released from risk.
59. As a simple example, consider the following assumptions:
- (a) An insurer has an initial estimate of expected cash outflows of \$1 million based upon 1000 expected claims with a mean estimate of \$1000.
 - (b) The single margin is \$100,000.
 - (c) At the end of the first reporting period subsequent to initial recognition, the insurer had reported claims in this portfolio of 200 claims at \$800 each
 - (d) Expected cash outflows does not change
60. This example would imply a baseline ratio of .16, calculated as follows: $(200 * \$800) / (1000 * \$1000)$. If the insurer did not assess the variability in cash flows, this would imply profit recognition of \$16,000 $(\$100,000 * .16)$.
61. This calculation of profit recognition may be inappropriate if the insurer's past experience at this particular point in the life cycle (based on the facts and circumstances above) would indicate that exposure to variability in cash flows continues between the claim report date and end of the life. Therefore, the insurer should qualitatively assess the facts and circumstances to determine any adjustments to if the initial baseline ratio to reflect the remaining exposure to risk.
62. The insurer may find that these facts and circumstances indicate the following:
- (a) Half of the claims (100 in the example above) are still being investigated or negotiated and history indicates that during this phase the amount actually

settled could change significantly thereby indicating that profit recognition would not be appropriate at this stage

- (b) Of the half remaining (100 in the example above), a settlement has been reached for half (50 claims at \$600) while the remainder have been paid (50 claims at \$600) and history indicates (as do the actual payments in this example) that once settlement is reached, the amount paid is not significantly different thereby indicating profit recognition would be appropriate.
63. This analysis would result in an adjustment to the baseline ratio from .16 to .06 calculated as follows:
 - (a) $(100^3 * \$600) / (1000 * \$1,000)^4 = .06$
 64. The adjusted ratio would result in profit recognition of \$6,000 compared to \$16,000 calculated under the baseline ratio.
 65. Admittedly, for this example the insurer would not need to calculate a baseline ratio and adjust that amount but instead simply calculate the adjusted amount. However, the staff have provided this methodology for application to all contracts and believes there may be instances where a portion of the baseline ratio would be appropriate for profit recognition given the facts and circumstances resulting in a percentage of the .16 taken to profit.
 66. Once the insurer determines the adjustment to the baseline ratio, it would then multiply the adjusted ratio by the single margin to determine the amount of profit to recognize.
 67. Although the composite margin was criticized as being “formulaic”, unfortunately some bit of a formula must be retained in order to calculate the realization of profit over time. As we have established above, the single margin approach views the entire margin as potential profit that is at risk and the realization of that margin should occur as the entity is released from risk. Given that the staff believes the release from risk is a function of the variability in cash flows, we believe that it is appropriate to:
 - (a) Recognize profit as the insurer is released from risk because variability is reduced as claims develop over time, and

³ This amount represents the 100 claims with a reduction in variability of the cash flows.

⁴ This amount represents the original expected cash outflow estimate. The simplifying assumption was this estimate did not change.

- (b) Profit should be a calculation based on the adjusted baseline ratio of actual claims incurred to the total expected cash outflows
68. Therefore the staff recommend the following:
- (a) An insurer would apply the adjusted ratio to the single margin determined at initial recognition of the insurance contract. The resulting amount less the single margin recognized in earnings in previous periods would be recognized in current period earnings.

Answering Question 2

69. To answer the second question in paragraph 39 above the staff examined the characteristics of a risk adjustment as provided in paragraph B72 of the IASB's ED. Paragraph B72 states:
- (a) To meet the objective [of the risk adjustment], the risk adjustment shall, to the extent practicable, have the following characteristic:
 - (i) Risks with low frequency and high severity will result in higher risk adjustments than risks with high frequency and low severity.
 - (ii) For similar risks, contracts with a longer duration will result in higher risk adjustments than those of a shorter duration.
 - (iii) Risks with a wide probability distribution will result in higher risk adjustments than those risks with a narrower distribution.
 - (iv) The less that is known about the current estimate and its trend the higher the risk adjustment shall be.
 - (v) To the extent that emerging experience reduces uncertainty, risk adjustments will decrease and vice versa.
70. The staff took each of the above characteristics in turn and compared the results that would be obtained if a single margin were used in lieu of a risk adjustment. We generally compared the exposure to risk remaining after profit realization to the size of the risk adjustment to determine if that exposure remaining was generally consistent and met these characteristics.

Risks with low frequency and high severity

71. The staff believe because we are allowing flexibility in the formula to calculate the realization of profit, the exposure to risk remaining for these types of contracts would be generally consistent with a risk adjustment and therefore meet this characteristic. It is logical to assume that it would be difficult to prove that the reduction of the variability in the cash flows would occur early in the life cycle (eg based upon an incurred but not reported claim) for insurance contracts that have a risk profile of low frequency and high severity. The staff would expect that these contracts would realize profit closer to the end of the life cycle. This would result in a larger amount of exposure to still be released because of lower profit realization earlier. We would also expect the opposite results for those contracts that are high frequency and low severity. The frequency of the claims would lead us to believe that profit realization earlier in the life cycle would be warranted as past experience may dictate the outcome thus reducing the remaining exposure to risk consistent with this characteristic.

For similar risks, contracts with a longer duration will result in higher risk adjustments

72. The staff do not necessarily agree with this characteristic for all contracts. Two contracts could have different durations but have the same risk profile and therefore we would not expect the longer duration contract to necessarily have a larger risk adjustment based on duration alone if there is little risk to the cash flows. However, for those contracts where this assumption may hold true, the staff believe that the exposure to risk remaining under a single margin approach would be consistent given that we have based the realization of profit on a reduction in the variability of cash flows.

Wide probability distributions vs. narrower distributions

73. Given that the width of the distribution is directly related to the variability of the cash flows (eg. as the distribution narrows, it comes closer to the mean), we believe that the remaining exposure to risk is consistent under the single margin approach because as variability is reduced, profit is realized and thus less exposure remains.

Less that is known about the current estimate and its trend the higher the risk adjustment

74. Two factors an insurer must consider in selecting the point at which the variability in the cash flows is reduced and therefore profit may be realized are:
- (a) The entity's relative experience with the types of contracts, and
 - (b) The entity's past experience in estimating expected cash flows.
75. We believe these factors are directly related to the notion captured in this characteristic for the risk adjustment. Therefore, we believe the remaining exposure after profit realization would be consistent with this characteristic for the risk adjustment.

Emerging experience reduces uncertainty, risk adjustments will decrease

76. As with the previous characteristic, this is directly consistent with determining when profit realization can occur under a single margin approach as analyzed and presented above.
77. In examining these characteristics, the staff believe that the single margin approach is perhaps more consistent with these characteristics for all types of cash flow distributions whereas some of the techniques offered for the risk adjustment may not meet these characteristics in some circumstances.
78. For instance, the characteristic of low frequency and high severity may not be met in all instances depending on the technique used to calculate the risk adjustment. To illustrate, paragraph B95 of the ED states:
- (a) Because a confidence level technique focuses on one point in the probability distribution, it satisfies this characteristic [low frequency and high severity] only if the distribution is not particularly skewed. Consequently, a confidence level technique is not appropriate for distributions that are highly skewed.
79. There are other instances noted throughout paragraphs B98 through B102 where some of these same problems occur. We do not believe that a single margin approach would have this particular issue and therefore removes a layer of complexity in the model because it is easier to calculate.

Comparability

80. Many of the criticisms of the risk adjustment appear to focus on comparability of the various techniques. We do not believe comparability would be as significant an issue with a single margin approach either across entities or within an entity if appropriate disclosures were included to mitigate remaining concerns. To assist with comparability, the staff believes it is important to disclose the methodology used (ie. adjustments made to the baseline ratio, facts and circumstances considered for adjusting the ratio and where the claim is in the life cycle as the portfolio is measured) to determine profit realization.
81. Therefore the staff recommend:
- (a) An insurer should disclose the methodology used to calculate the profit realization of the margin.
 - (b) To meet this requirement the insurer shall disclose the following:
 - (i) If profit realization is calculated on the basis of time, or
 - (ii) If not on the basis of time:
 - (a) The baseline ratio calculation
 - (b) Adjustments made to the baseline ratio
 - (c) Facts and circumstances considered as part of the adjustment to the baseline ratio
 - (d) Where the claims is in the life cycle of the portfolio to determine the adjustment to the baseline ratio
82. If these disclosures were added, users could potentially re-calculate the profit realization, compare that realization to a benchmark starting point of potential profit, and compare methodologies across entities. Additionally, because profit realization will occur as the variability in the cash flows is reduced, there will not be a need to know the technique selected to calculate the risk adjustment. Furthermore, the user will not need to sift through disclosures to obtain the assumptions used in the calculation.
83. The staff believe that currently, in jurisdictions that use a risk adjustment, these calculations are prescribed, calculated for solvency purposes, or are simply different across jurisdictions. Some staff find it difficult to understand how comparability

would be improved if a risk adjustment was required in all jurisdictions and the techniques used are not limited to some extent.

Reducing complexity

84. The FASB staff believe the single margin approach will reduce complexity in the overall model. One of the difficulties with the calculation of the risk adjustment expressed through feedback was the determination of diversification. As discussed in the overview provided at agenda paper 3E/68E, some field participants expressed concern in determining the application of such diversification. The single margin approach eliminates this issue.
85. Additionally, the users spoken to during the FASB's recent outreach expressed to us that one of the critical pieces of data used is the development of the loss reserves over time. This data is obtained through footnote disclosures of changes in reserves for prior periods or with a ten-year loss development table. The information provides users with a picture of management's re-estimation of reserves throughout time.
86. The FASB staff believe the baseline ratio coupled with the facts and circumstances regarding remaining variability based upon where the contract is in the life cycle captured in this methodology will provide users with more useful information because it incorporates all of the elements users find useful and discussed above. The staff have provided an example of the disclosures discussed above taken from a public filing of an insurance entity to further illustrate our discussion for those board members that are unfamiliar with the information provided. We have included this information as part of Appendix B.

Staff Recommendation

87. Given the analysis above, some staff believe that a single margin approach that realizes profit as the insurer is released from its exposure to risk provides users of the financial statements with decision useful information, eliminates some of the complexities of the current model, and provides comparability across and within entities.
88. For these reasons the FASB staff recommend the following:

- (a) An insurance contract measurement model should use a single margin approach that realizes profit as an insurer is released from its exposure to risk continuously over time.
- (b) An insurer should realize profit from the single margin as it satisfies its obligation to stand ready to compensate the policyholder in the event of an occurrence of a specified uncertain future event that adversely affects that policyholder.
- (c) An insurer may satisfy a portion of its obligation as it is released from exposure to risk evidenced by a reduction in the variability of cash outflows.
- (d) An insurer is released from its exposure to risk in one of the following ways:
 - (i) If the variability of the cash flows of a specified uncertain future event is primarily due to timing of that event, an insurer is released from risk through the passage of time.
 - (ii) If the variability of the cash flows of a specified uncertain future event is primarily due to the frequency and severity of that event, an insurer is released from risk as variability in cash flows is reduced over time.
- (e) If the variability of the cash flows is primarily due to the frequency and severity of an unspecified event, an insurer should calculate a baseline ratio of actual claims reported (frequency x severity) to the total expected cash outflows each reporting period.
- (f) An insurer should consider specific facts and circumstances to qualitatively determine how a reduction in the variability of cash flows would adjust the calculated baseline ratio (calculated in (e) above) to determine the extent to which the insurer is released from risk. Those facts and circumstances should include the following:
 - (i) The entity's relative experience with the types of contracts,
 - (ii) The entity's past experience in estimating expected cash flows,
 - (iii) Inherent difficulties in estimating expected cash flows,
 - (iv) The relative homogeneity of the portfolio and within the portfolio, and
 - (v) Past experience not being representative of future results.

- (g) A reduction in the variability of the cash flows such that an insurer is released from risk is a matter of judgment and should be based upon facts and circumstances unique to the entity and the nature of the insurance contract. Different insurers may define a reduction in variability of cash flows in different ways, during different points in the life cycle of an insurance portfolio. The points in the life cycle that should be included for examination and assessment include the following:
 - (i) When an insurer incurs a claim but that claim has not yet been reported.
 - (ii) When an insurer incurs a claim and that claim has been reported.
 - (iii) The point at which the parties to the contract have agreed upon a settlement amount.
 - (iv) The point at which the claim has been paid.
- (h) An insurer would apply the adjusted ratio to the single margin determined at initial recognition of the insurance contract. The resulting amount less the single margin recognized in earnings in previous periods would be recognized in current period earnings.
- (i) An insurer should disclose the methodology used to calculate the profit realization of the composite margin.
 - (i) To meet this requirement the insurer shall disclose the following:
 - (a) If profit realization is calculated on the basis of time, or
 - (b) If not on the basis of time:
 - (i) The baseline ratio calculation
 - (ii) Adjustments made to the baseline ratio
 - (iii) Facts and circumstances considered as part of the adjustment to the baseline ratio
 - (iv) The point in the life cycle of the portfolio considered when adjusting the baseline ratio

Questions for the boards

- 1) Do the boards agree with the staff recommendation that an insurance measurement model should use a single margin approach that realizes profit as an insurer is released from its exposure to risk?
- 2) Do the boards agree with the staff recommendations (b-i)? If not, which recommendations in particular do you disagree with and why?