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International Accounting Standards Board

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Note: These notes are based on the staff paper prepared for the Insurance Working Group Meeting. Paragraph numbers correspond to paragraph numbers used in the Insurance Working group paper. However, because these notes are less detailed, some paragraph numbers are not used.

INFORMATION FOR OBSERVERS

IASB Meeting: **Insurance Working Group, April 2008**
Paper: **Risk margin – cost or required compensation? (Agenda paper 7C)**

Purpose of this paper

1. This paper discusses two views of the purpose of a risk margin:

   (a) View 1: risk margins represent the cost of bearing risk; or

   (b) View 2: risk margins represent the compensation an entity requires for bearing risk.

2. The paper considers two questions:

   (a) Do the two views lead to different results?

   (b) If they lead to different results, which view will result in the most decision-useful information for users of an insurer's financial statements?

3. This paper is divided into the following sections:

   (a) View 1: risk margin as cost of bearing risk (paragraphs 4-8)

   (b) View 2: risk margin as required compensation for bearing risk (paragraphs 9-17)

   (c) Frictional costs (paragraph 18)

(d) Implications for performance reporting (paragraphs 19 and 20)

(e) Questions for participants (paragraphs 21-23)

View 1: risk margin as cost of bearing risk

4. Respondents to the discussion paper generally agreed that the carrying amount of insurance liabilities should include a risk margin. Some argued that the carrying amount of insurance liabilities should include the cost of bearing risk (for example, the cost of holding the necessary capital), but should not include any further profit that the insurer, or another entity, would require for bearing that risk. This view (view 1) is expressed in, for example, the response from the European Insurance CFO Forum and the CEA:

> "We believe that the risk margin should represent the cost of risk and could be defined as a risk margin in addition to the expected present value of future liability cash flows required to manage the portfolio. In our view the cost of capital basis represents the most appropriate means of determining the margin and this should reflect the excess return over risk free rates that any company (either the originating company or a transferee) would require to manage the insurance obligations over the lifetime of the portfolio. We do not believe that the risk margin should include any compensation other than this compensation for risk."

5. Proponents of view 1 typically suggest that risk margins would be quantified using a cost-of-capital approach. For example, suppose that an entity's cost of capital is 15% (ie its investors require a return of 15% annually) and it expects to earn 10% annually on the investments backing the capital: thus the cost of holding its required capital is 5% annually. The risk margin would equal the present value of the cost of holding the capital required throughout the life of the liability. (This paper does not consider whether the required capital should be based on an internal capital model, a regulatory requirement or a desire to maintain a desired rating.) Example 1 illustrates this view.

Example 1

Insurer A issues contracts on 1 January. The expected value (ie the probability-weighted average) of the payments to policyholders is CU1,040,[1] payable on 31 December. The risk-free discount rate is 5% and A invests in risk-free assets. A incurs no acquisition costs.
A estimates that it needs to hold capital of CU100 from 1 January to 31 December. A also estimates that its shareholders require a return of 15% on capital backing contracts of this

[1] CU = Currency unit

type. The present value of the expected cost of holding that capital for a year is CU10/1.05 (Expected return of CU5 less required return of CU15 = cost of CU10, discounted at 5%). Using this required return, A sets the premium for the contracts at CU 1,000. This provides an expected return of CU 15, equal to the required return of 15% on its capital of CU 100, as follows:

	CU
Expected net payment of 4% to policyholders on liabilities of CU1,000 (policyholder benefits of CU1,040 less premiums of CU1,000)	(40)
Interest at 5% on assets of CU1,100	55
Total expected return	15

If A recognises no profit or loss at inception, its assets and liabilities on 1 January 2001 are as follows:

Assets – cash	1,100
Insurance liabilities	(1,000)
Equity	100

The measurement of the liability at 1 January is as follows:

Expected present value of cash flows (CU 1,040 / 1.05)	990.5
Cost of capital for one year [(100 x 15% / 1.05) - (100 x 5% / 1.05)]	9.5
	1,000

6. Proponents of view 1 see the cost of capital as being almost equivalent to a cash cost. In their view, it costs money to hold capital and the insurer must incur that cost, just as it must incur the cost of paying its employees. On this view, capital is simply one of the factors of production, just like, for example, labour and land, and so it is consistent to include the cost of that factor in the same way as the cost of the other factors.

7. Some proponents of view 1 believe that the **compensation** required by an insurer for bearing risk is more than simply the **cost** of bearing that risk (eg the cost of holding the required capital). They argue that a risk margin should include only the cost of bearing risk, not the full compensation for bearing risk. To examine this view, we need to consider what an insurer will require the premium to cover. The insurer will want a premium that is sufficient to cover at least:

(a) the expected present value of the cash flows arising from the contract.

(b) an adequate margin for the risks to be undertaken (risk margin) and, if applicable, services to be provided (service margin).

(c) acquisition costs.

(d) compensation for the effort of assembling a portfolio of contracts (described in the discussion paper as an implicit portfolio assembly fee). This would include:

(i) the current period costs of finding policyholders, underwriting and originating the contracts.

(ii) past costs such as investment in branding, distribution and product development, as well as a reasonable return on that investment.

(e) explicit or implicit fees for separate services, if any, provided to the policyholder at inception.

8. This paper looks only at the risk margin (part of item ((b)). We will look separately at the other part of (b) (namely the service margin). Furthermore, for items (a) (expected present value of cash flows) and (e) (services provided separately at inception), there is no distinction between views 1 and 2. A separate agenda paper on day one profit looks at items (c) (acquisition costs) and (d) (portfolio assembly).

View 2: risk margin as required compensation for bearing risk

9. Proponents of view 2 see the risk margin for a portfolio of insurance contracts as the compensation that insurers would require for bearing the risk associated with the portfolio. (If view 2 is adopted, a follow up issue will be to determine whether the reference point should be that the compensation the insurer itself would require, or the compensation that insurers in general would require. This paper does not discuss that issue. In addition, this paper does not discuss how a portfolio should be defined, for example the extent to which diversification should be considered.)

10. Some proponents of view 2 regard the cost of capital approach as one method for trying to estimate the compensation required for bearing risk. In their view, there is no

distinction between the **cost** of bearing risk and the **compensation** that entities require for bearing risk. Example 2 illustrates this point.

Example 2

Insurer B issues contracts on 1 January. B estimates that it needs to hold capital of CU200 from 1 January to 31 December (unlike the CU100 held in example 1 by insurer A). Like insurer A, B determines that it will achieve a satisfactory return from these contracts if the expected net payment to policyholders (expected benefits less premium) is 4% of premiums. Thus, B charges a premium of CU1,000. This gives B an expected return of 10% on its capital of CU200. In other words, for risk-free assets backing liabilities of this type, B's cost of capital is 10%. All other facts are the same as in example 1.

	CU
Expected net payment of 4% to policyholders on liabilities of CU1,000 (policyholder benefits of CU1,040 less premiums of CU1,000)	(40)
Interest at 5% on assets of CU1,200	60
Total expected return	20
If B recognises no profit or loss at inception, its assets and liabilities on 1 January 2001 are as follows:	
Assets – cash	1,200
Insurance liabilities	(1,000)
Equity	200
The measurement of the liability at 1 January is as follows:	
Expected present value of cash flows (CU 1,040 / 1.05), as in example 1	990.5
Cost of capital for one year [(200 x 10% / 1.05) - (200 x 5% /1.05)]	9.5
	1,000

In example 2, the required capital is higher than in example 1 (CU200 instead of CU100), but this difference is exactly offset by the lower required return (10% instead of 15%).

11. Proponents of view 2 argue that the cost of capital is simply a shortcut method for determining the compensation that the insurer (and investors in the insurer) requires. The cost of capital is merely a blend of the required return for the various assets and liabilities of the insurer (in principle, including internally generated goodwill and other unrecognised intangibles, such as franchise value). The cost of capital is 15% in

example 1 and 10% in example 2. However, that difference arises because of different mixes of assets, liabilities and capital in the two examples. In both examples, the insurers require an expected return of 5% from the assets and are willing to pay a net return of 4% to policyholders.

12. For the discussion in this paper, it is convenient to describe the cash flows with policyholders as a receipt of CU1,000 and a subsequent repayment of that amount together with interest at 4%. (We do not wish to imply that this description would be valid for other purposes.) Put differently, in examples 1 and 2, insurers are willing to pay a return of 4% to policyholders. This is 1% below the risk free rate of 5%. Thus, the risk margin for these two identical liabilities is 1%.[2]

Retail margins and wholesale margins

13. Some proponents of view 1 may feel that:

    (a) the *compensation* required for bearing risk describes the margin an insurer would charge the policyholder for bearing risk (a retail margin).

    (b) the *cost* of bearing risk describes the margin a third party would require for assuming all the insurer's contractual obligations for a portfolio of insurance contracts (a wholesale margin).

14. Clearly, an insurer will charge retail policyholders more than a third party would charge for a portfolio of contracts with the same cash flow profile and risk profile. There are various reasons for this:

    (a) Finding and adding retail policyholders is costly. An insurer will aim to recover this additional cost in its pricing. However, a third party taking over an existing portfolio of retail contracts would not incur these costs and so would not seek to recover them. Therefore, the retail margin would include a recovery of that additional cost, but a wholesale margin would not include it. If the insurer incurred that additional cost in prior periods, this could give rise to a net day one profit, depending on the basis adopted for the margin. A day one profit will also arise if the insurer priced the

[2] More precisely, the required risk margin is (CU1,040/1.04) -(CU1,040/1.05) = CU9.5 (the same amount as shown in examples 1 and 2).

contract to provide a profit on its investment in those additional costs. Agenda paper 7D discusses whether an insurer should recognise these net day one profits immediately in profit or loss, or in some other way.

(b) Servicing a large number of retail contracts is more costly than servicing a single contract that has the same aggregate premium inflows and policyholder benefit outflows. However, a third party taking over an existing portfolio of retail contracts would also have to incur those additional servicing costs and would seek to recover them in its pricing. Therefore, the expected cash flows for a portfolio of retail contracts would include the additional cost of servicing them. This would be true for both the insurer and a third party taking over the contracts. Consequently, those expected servicing costs affect neither the wholesale margin nor the retail margin.

(c) In some cases, an insurer might be able to service the contracts more (or less) efficiently than a third party, perhaps because of economies of scale. However, the servicing costs would affect the expected cash flows. They would not affect the wholesale margin or retail margin.

(d) An insurer might price its contracts to provide an additional return on the costs it incurs in providing retail servicing. If so, there could be a distinction between retail **service** margins and wholesale **service** margins. Agenda paper 7E discusses service margins.

(e) The insurer may be more or less risk averse than third parties. Thus, a risk margin based on the insurer's risk preferences could be higher or lower than a risk margin based on the risk preferences of third parties. This paper does not investigate whether margins should be based on the insurer's own risk preferences. However, there is no reason to think that the insurer would always be more risk adverse than third parties, nor that the insurer would always be less risk averse than third parties.

(f) A third party taking on the portfolio might demand an additional margin because it has less information than the insurer about the portfolio (information asymmetry). This paper does not discuss further whether the risk margin should include an amount for information asymmetry. In the project on fair value measurements, the staff is investigating whether information asymmetry affects the determination of fair value.

That investigation may provide relevant input in due course for the project on insurance contracts, depending on which measurement attribute the Board adopts for insurance contracts.

15. In summary, the retail margin might be higher than the wholesale margin because of the cost of finding and adding retail policyholders. However, if we define the retail margin as made up of a retail risk margin (the required compensation for bearing risk) and a retail distribution margin (the required compensation for finding and adding policyholders), the retail risk margin and the wholesale risk margin are expected to be the same, unless differences arise from information asymmetry or differences in risk preferences. If the retail margin also includes a retail service margin, that is likely to be larger than the wholesale service margin, if any.

16. Example 3 provides a further illustration of some of these thoughts.

Example 3

Insurer C intends to offer an insurance contract to potential policyholders. C estimates that:

- the expected present value of policyholder benefits is CU90,
- the expected present value of the costs it will incur in servicing the contract is CU6.
- an appropriate margin for bearing risk and providing other services is CU10.
- C will incur acquisition costs of CU5.
- C requires CU7 as a contribution towards recovery of costs that it incurred in the past in developing the branding, distribution and product development needed to put it in a position to put this product on the market. The CU7 also includes a contribution towards a return on those costs.

Thus, C requires a premium of CU118 for this contract (CU90 + CU 6 + CU10+CU5+CU7).

What would a third party require to induce it to take over C's obligations? The third party would require a payment that covers the policyholder benefits (CU90) servicing costs (CU6) and margin (assume for now that the margin required by the third party is also CU10, as

discussed below). Thus, the third party would require a payment of CU106 (CU90 + CU6 + CU10) to induce it to take over C's obligations.

How does this look from C's side? C would retain the remaining CU12 of the premium receive. This pays C for the acquisition costs (CU5) and provides C with the required contribution of CU7 to past costs. Why would C be willing to give up the opportunity to earn another CU10 for bearing risk? To answer that, note that C is also relieved of the obligation to bear the risk. Assume for a moment that CU10 is exactly the amount at which C is indifferent between taking on (or retaining) the contractual risks and abandoning them. In other words, for CU10.01, C would definitely accept the risk and for CU9.99 C would definitely reject the risk. If that is the case, C is indifferent between retaining the risk for an expected return of CU10 and giving up that expected return in exchange for being relieved of the risk.

It is not automatically true that a third party would always require the same margin as C (CU10 in this example). However, if they do require different margins, this example shows that the difference does not arise because C is operating in a retail market and the third party is operating in a wholesale market. Any such difference must arise from other factors, such as differences in entity-specific risk preferences or information asymmetries.

In addition, a difference could arise if the retail service margin, if any, differs from the wholesale margin, if any. This example does not illustrate service margins. Agenda paper 7E discusses service margins.

17. To conclude, proponents of view 2 believe that the risk margin should reflect the required compensation for bearing risk. They believe that there is no distinction between the cost of bearing risk and the compensation required for bearing risk. Moreover, because risky liabilities require more capital to support them, cost of capital computations are simply one way of trying to determine the required price for bearing risk.

Frictional costs

18. Some proponents of both views 1 and 2 note that holding capital causes certain "frictional costs" and they would consider those frictional costs in determining the risk margin:

    (a) in some countries, shareholders may face double taxation for an investment held through an insurer rather than directly by the shareholder or through a mutual fund;

    (b) shareholders may demand a risk premium for "agency costs", such as the:

        (i) the lower transparency of investments held in a complex structure such as an insurer rather than directly or through a more transparent structure such as a mutual fund; and

        (ii) the risk that management may invest inefficiently in ways that destroy shareholder value, for example in unprofitable acquisitions.

    (c) Some countries require insurers to invest in assets that do not earn a market return.

Implications for performance reporting

19. If risk margins are viewed as the *cost* of bearing capital, an insurer will report the release of those margins as income in the period when it actually incurs that costs by holding the required capital.

20. If risk margins are viewed as *compensation* for bearing risk, an insurer will report the release of those margins as income in the period when it actually bears those risks.

Questions for participants

21. **This paper presents two views of the purpose of a risk margin in general purpose financial reporting:**

    (a) **View 1: risk margins represent the cost of bearing risk.**

    (b) **View 2: risk margins represent the compensation an entity requires for bearing risk.**

22. **Will these two views lead to different results in practice? If so, which view will result in the most decision-useful information for users of an insurer's financial statements?**

23. **If you favour a different view of the purpose of a risk margin, please describe it. Why do you prefer it?**