# STAFF PAPER

FASB | IASB Meeting

| Project | Insurance Contracts | | |
|---|---|---|---|
| Paper topic | The use of other comprehensive income (OCI) for presenting the effect on the insurance contract liability arising from changes in specified assumptions | | |
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## What is this paper about?

1. This is the second paper in a series of four papers on consideration of the use of other comprehensive income (OCI). The purpose of this paper is to ask the boards to consider the use of OCI to record changes in the insurance contract liability arising from changes in specified assumptions.

2. In addition, this paper asks the boards to determine the following

   (a) Whether to require or permit the use of OCI

   (b) The unit of account

   (c) Frequency of election/determination.

3. Agenda Paper 2A/82A contains background information on the use of OCI including feedback from constituents both in the comment letter process and additional outreach as well as alternative approaches.

4. Agenda Paper 2C/82C asks the boards to determine the mechanics of an approach that records some changes to the insurance liability in OCI.

5. Agenda Paper 2D/82D discusses whether to require a loss recognition test.

6. Agenda paper 2E/82E provides a comprehensive example of how OCI can be used to present changes in the insurance liability arising from changes in interest rates.

## Staff analysis

7. As discussed in AP 2A/82A, the IASB Exposure Draft, *Insurance Contracts* (ED) and the FASB Discussion Paper, *Preliminary Views on Insurance Contracts* (DP), proposed that the insurance liability should be measured on a current value basis with changes in the insurance liability recognised in profit or loss. Respondents to the ED and the DP, expressed concern about the volatility that could arise from recognizing changes in the insurance liability in profit or loss. They stated that recognizing all changes in the insurance liability in profit or loss:

   (a) would result in an accounting mismatch[1] if the assets backing insurance contracts are not measured at fair value through profit or loss; and

   (b) does not provide relevant information about an insurer's performance.

8. A number of constituents have stated that their concerns could be addressed if some of the changes in the insurance liability are presented in OCI rather than profit or loss. In particular, they have suggested that presenting changes in the insurance liability arising from changes in interest rates in OCI would achieve the following objectives:

   (a) It would reduce any accounting mismatch between the presentation and measurement of the insurance liability and the presentation and measurement of the assets backing those liabilities (assuming the assets are

[1] An accounting mismatch arises if changes in economic conditions affect assets and liabilities to the same extent, but the carrying amounts of those assets and liabilities do not respond equally to those economic changes because different measurement attributes are applied

measured at amortised cost or at fair value through OCI). This is discussed in paragraphs 13-27.

(b) It would provide relevant information about an insurer's performance by:

(i) presenting information in the statement of comprehensive income in a way that reflects the long-term nature of insurance.

(ii) reflecting only the insurers' core operations in net income. That is, the financial statements would clearly indicate the insurer's underwriting results, including: a) did the insurer price its business accurately and b) how have the insurer's assumptions (e.g., mortality, morbidity, lapse, inflation, etc.) changed since contract inception?

This is discussed in paragraphs 28-35.

9. Presenting changes in the insurance liability arising from changes in interest rates in OCI would result in the following information:

(a) In profit or loss, net interest expense on the insurance liability would be presented based upon the interest rate at the inception of the insurance contract (a locked in rate);

(b) Accumulated OCI would equal the difference between the insurance liability discounted at current interest rates and the insurance liability discounted at a locked in rate.

10. It should be noted that respondents generally did not suggest the use of OCI for changes in variables other than variables that are sensitive to interest rate movements. Changes in other variables (for example mortality rates, frequency and/or severity of claims) are generally viewed as relevant to the performance of the insurer and do not reverse. In addition, insurers financial supplements generally include a non-GAAP measure of operating profit (see Agenda Paper 2A/82A for staff consideration of operating profit) that includes income and expense arising from non-financial assumptions (and changes in them). The staff

note that these supplements are widely used by analysts. The staff believe that this reflects the fact that such changes are:

(a) regarded as part of an insurer's operations

(b) affected by management decisions and,

(c) to an extent, manageable, for instance through pricing.

11. Consequently, the staff believe that only changes in variables that are sensitive to interest rate movements should be considered for inclusion in OCI.

12. The following sections discuss how the use of OCI to present changes in the insurance liability arising from changes in interest rates could address respondents concerns and the objectives. In addition, this paper discusses whether OCI should be used for changes in interest sensitive assumptions.

### *Using OCI to present changes in the insurance liability would reduce an accounting mismatch*

13. Asset liability management (ALM) is a key aspect of the long duration life insurance business. A key driver of the asset strategy adopted by an insurer will be its liabilities' profile and the need to ensure that it holds sufficient assets of appropriate nature, term and liquidity to enable it to meet its obligations as they become due. ALM looks at all risks requiring coordination of the insurer's assets and liabilities, especially market risk, underwriting risk and liquidity risk. Insurers manage the risks of asset liability mismatch by matching the assets and liabilities according to their maturity pattern or matching their duration, by hedging and by securitization.

14. Because the asset strategy is critical to an insurer's business model insurers believe that the required accounting for its liabilities should reflect these strategies[2] and be similar to the accounting for the assets.

[2] Specific ALM strategy is needed for lines of business that have certain characteristics, for example: liability payments are guaranteed to be made on pre-set dates; asset cash flows will be reinvested; profits are earned

15. Below is a table summarizing some of the types of assets an insurer might hold and the classification and measurement of those assets under current U.S. GAAP, the FASB's tentative decisions in the financial instruments project, and IFRS 9.

16. The IASB is considering whether to amend the classification and measurement requirements of IFRS 9 to introduce a new fair value through OCI classification category for some financial assets. For the purposes of this paper, the staff have assumed that eligible debt instruments will be measured using the FV-OCI category.

primarily on spread – i.e., the difference in interest received on assets and interest credited to liabilities; the size of the interest spread profit margin is small compared to the assets and liabilities; the duration of the liabilities is such that assets which have the appropriate duration are difficult to find; prominent investment performance features which require suitable assets to honor the guarantees; one or more financial options for which ALM might mean the use of hedging techniques; the business is heavily reinsured and the insurer must pay claims prior to receiving payment from the reinsurer.

| | U.S. GAAP | | IFRS | |
| --- | --- | --- | --- | --- |
| **Asset** | **Current** | **Tentative decisions[3]** | **Current IFRS 9** | **Assumed measurement under an amended IFRS 9** |
| Fixed income Securities | FVPL[4]<br>FV – OCI[5] (with recycling) | FVPL<br>FV – OCI (with recycling)<br>Amortized cost | FVPL<br>Amortized cost[6] | FVPL<br>FV – OCI<br>Amortised cost |
| Equity securities[7] | FVPL<br>FV – OCI (with recycling) | FVPL | FVPL<br>FV – OCI (no recycling) | FVPL<br>FV – OCI (no recycling) |
| Unsecuritized mortgage loans | Amortized cost<br>Lower of cost/FV | FVPL<br>FV - OCI<br>Amortized cost | FVPL<br>Amortized cost | FVPL<br>FV – OCI<br>Amortised cost |
| Equity method investments | Equity method<br>FVPL | Not yet redeliberated | Equity method (IAS 28) or FVPL | Equity method (IAS 28) or FVPL |
| Derivatives | FVPL | FVPL | FVPL | FVPL |
| Real Estate | Amortized cost | Amortized cost | Amortized cost<br>FVPL (IAS 40) | Amortized cost<br>FVPL (IAS 40) |

17. If an insurer is required to record the changes in the insurance contract liability in profit or loss (as proposed in the ED/DP) accounting mismatches will arise:

    (a) If the assets backing the insurance contracts are debt securities measured at fair value through OCI, the accounting mismatch arises in profit or loss because the changes in the carrying amount of the insurance contract

[3] The classification and measurement of debt instruments under the FASB's financial instruments project depends on both the characteristics of the instrument and the entity's business strategy for managing the assets
[4] FVPL: Measured at fair value with changes recognized in profit or loss
[5] FV – OCI: Measured at fair value with changes recognized in other comprehensive income.
[6] Under IFRS 9, debt instruments can be measured at amortized cost if the business model is to hold the asset to collect the contractual cash flows and the contractual terms of the financial asset gives rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal outstanding
[7] Under IFRS 9, FV – OCI applies to equity securities that are not held for sale (non-trading) and for which OCI classification is elected; recycling of the realized gains/losses to net income on disposal of the instrument is not permitted and dividends are presented in profit or loss.

liability would be presented in profit or loss. There would be little accounting mismatch in equity because both assets and liabilities would be measured at current value.

(b) If the assets backing the insurance contracts are equities measured at fair value through other comprehensive income (under IFRS 9 only as the FASB tentative decisions would not allow equities to be recorded at fair value through OCI), there would also be an accounting mismatch in profit or loss because changes in the carrying amount of the insurance contract liability would be presented in profit and loss whereas most changes in the carrying amount of the assets would be presented in OCI. There is also an economic mismatch because the insurance contracts and the equities do not respond in the same way to changes in economic conditions. In general we believe that the economic mismatch would have a far greater effect than the accounting mismatch. We do not discuss the mismatch for these instruments further in this paper.

(c) If the assets backing the insurance contracts are measured at amortized cost, the accounting mismatch arises in equity and in profit or loss because changes in the measurement of the insurance contract liability do not react in the same way as changes in the assets.

18. Regardless of whether an insurer's assets are measured at amortized cost or fair value with changes in OCI, presenting the effects on the insurance liabilities resulting from changes in the discount rate in OCI may reduce the accounting mismatches that could result if those changes were reflected in profit or loss. This is particularly the case for the FASB and if the IASB decides to introduce a third category of financial asset that is measured at fair value through OCI, as many interest bearing assets held by insurers will qualify for the FV-OCI category.

19. Appendix A includes graphs that show the amount and percentage of US insurers' investments in various investment categories. It is important to note that these graphs show that approximately 75% of life, property-casualty, and health

insurers' investments are in bonds and cash and cash equivalents. Therefore, presenting the effects on the insurance liabilities resulting from changes in the discount rate in OCI with the effect of changes in the fair value of bonds in OCI would significantly reduce accounting mismatches. While accounting mismatches will still exist for those assets that are carried at fair value through profit or loss, these mismatches are expected to be significantly less for most insurers.

20. In order to illustrate the accounting mismatch that arises under the accounting approach in the IASB's ED and FASB's DP and how this mismatch could be reduced through the use of OCI the staff have prepared a series of examples which are included in Agenda Paper 2E/82E. Appendix B of this paper shows a simplified example.

21. The Basis for Conclusions to the IASB's ED discussed the accounting mismatch, and in particular, whether to reduce the mismatch by requiring or permitting insurers to present in OCI changes in insurance liabilities backed by assets that are not measured at fair value through profit or loss.

22. Paragraphs BC178-BC180 noted that requiring or permitting use of OCI might eliminate part of the accounting mismatch but would add complexity to the resulting information, would be difficult to understand and would be onerous for insurers to apply. This is because the insurer would need:

    (a) To determine the part of the insurance liability deemed to be backed by such assets. Insurance contracts may not be fully backed by assets that are not measured at fair value through profit or loss.

    (b) To track 'cost' information for that part of the liability, to achieve the desired split between amounts recognized in profit or loss and amounts recognized in OCI.

    (c) To determine whether and when to recycle amounts from OCI to profit or loss.

23. Furthermore, the Basis for Conclusions noted that insurers could avoid any accounting mismatch by using the options provided in IFRSs to measure the assets at fair value.

24. Insurers responded to these comments in their comment letters and in other forums as follows:

    (a) For some types of business, specifically long-duration life contracts, most insurers match their portfolio of financial instruments to the portfolio of insurance contracts. Non-life insurers typically do not match the asset portfolio with portfolios of insurance contracts. However, non-life insurance contracts are typically backed by assets that qualify to be measured at amortized cost or fair value through OCI.

    (b) Many believe that the costs of the additional complexity of presenting in OCI at least some components of the change in the insurance contract liability would be outweighed by the benefits of presenting the information in profit or loss.

    (c) While a determination of whether and when amounts in OCI should be recycled to profit or loss adds complexity, insurers perform similar tests today in most jurisdictions when performing liability adequacy test or premium deficiency reserve test.

25. Furthermore, many respondents disagreed that expecting insurers to use fair value options was an adequate response to this issue, because:

    (a) it precludes insurers from accounting for their assets on a basis the boards consider appropriate for other entities.

    (b) A greater weight is placed on an insurer's ability to account for its financial assets consistently with other financial institutions (on a 'level playing field') than on simplicity. Many believe strongly that insurers should not, in effect, be precluded from using amortized cost or FV-OCI if the financial assets qualify for that category.

(c) Most commentators placed more weight on an accounting mismatch in profit or loss than on a mismatch in equity. In other words, they suggested the boards should not preclude the use of OCI if the only reason is that a mismatch remains in equity when assets are measured on an amortised cost basis (the reason given in paragraph BC178(a)).

26. Even if both the change in the insurance liability and the assets backing those liabilities were recorded in profit or loss, the gains and losses are unlikely to offset each other exactly because changes in the asset's credit risk will be recognised and presented in profit or loss each reporting period while no offsetting changes in the credit risk (ie non-performance risk) of the insurance contract liability will be recognised (because credit risk is not a component of the proposed measurement of the insurance liability[8]). This, coupled with duration mismatches, will result in reported volatility. While the majority of life insurance entities agree that these mismatches are economic in nature, many insurers believe reporting them in OCI would ensure that the results of the insurer's core operations would not be overshadowed by these movements.

27. Finally, the staff note that current accounting under both US GAAP and IFRS provides an option to measure most financial assets at fair value through profit or loss in order to eliminate or reduce an accounting mismatch. In other words, current accounting for financial instruments permits an entity to eliminate or reduce an accounting mismatch by adjusting the measurement of the assets. The staff believe it would be equally appropriate to eliminate or reduce a mismatch by adjusting the presentation of changes in the carrying amount of the liability.

### *Using OCI to present changes in the insurance liability provides relevant information about an insurer's performance*

28. Many respondents to the IASB's ED and the FASB's DP acknowledged that using a current interest rate to discount the insurance liability would result in a relevant

[8] Even if credit risk was included as a component of measurement of the insurance liability, it would have limited correlation to the credit risk of the assets.

measure of insurance contracts in the statement of financial position. However, many respondents stated that recognizing the effects of changes in those rates in the income statement could result in significant income statement volatility that may not be representative of the insurer's performance because:

(a) The effect of changes in interest rates will, for many types of insurance contracts, net to zero over time;

(b) Reflecting changes in market interest rates in profit or loss could overshadow the underlying performance of the insurer; and

(c) Information about changes in credit spreads may not be particularly relevant to users.

29. The following sections discuss each of these points.

*The effect of changes in interest rates net to zero over time*

30. Some respondents to the IASB's ED and the FASB's DP noted that the effect of changes in market interest rates will for many types of insurance contracts net to zero over time. This is because, for most traditional insurance contracts, the benefit paid to the policyholder does not change with movements in interest rates. That is, regardless of movements in the interest rate:

(a) A traditional life insurance contract will pay a fixed amount at death

(b) An annuity contract will pay a fixed amount each period (as specified in the contract) for the policyholders life.

(c) A non-life claim will be based on the insured's loss up to the policy limit.

31. While showing the current value of the insurance liabilities in the statement of financial position is deemed important, some believe that because the changes in the liability attributable to market interest rates will net to zero over time, they are not a relevant performance indicator that should be recognized in net income. By recognizing the effects of changes in the discount rate in OCI, a current measure of

the expected cash flows would be presented in the balance sheet without recognizing the effects of those changes in current period net income.

*Changes in market interest rates could overshadow underlying performance*

32. Respondents to the IASB's ED and the FASB's DP noted that changes in the liability arising from changes in market interest rates can be very large and very volatile. Reflecting those changes in the income statement could overshadow the underlying performance of the insurer.

33. Many users of insurers' financial statements look at operating earnings which typically removes from net income gains and losses on financial instruments and changes in discount rates. Including changes in the discount rate in net income would potentially be an additional reconciling item for users when analyzing results that are core to insurance operations. Said differently, including changes in the discount rate in net income could result in insurers presenting additional non-GAAP measures.

*Information about changes in credit spreads may not be particularly relevant*[9]

34. Some argue that information about certain economic mismatches may not always be particularly relevant to users of financial statements. For example, some believe that when insurance liabilities and the assets backing them are both carried at a current measurement, swings in credit spreads on the assets may sometimes be of only secondary importance to users if an insurer holds those assets to collect principal and interest and if credit losses on those assets are not inconsistent with the estimates embedded in the measurement of those assets. For example as market credit spreads fluctuate, the asset fair value moves but the liability current

[9] The staff considered splitting "credit spread" (or illiquidity premium) in the discount rate for insurance liabilities from interest rate movements however decided against it as credit spreads are market related and are not related to credit losses (defaults) on the asset side and the movement in the risk-free rate and the movement in other variables that are included in the discount rate would introduce unnecessary complexity without a significant increase in decision-useful information.

fulfillment value does not. As long as the asset does not default, the credit spread changes reverse out over time.

35. Using a simplified example assume the balance sheet of an insurer has CU 100 billion of financial instruments to fulfill CU 100 billion of insurance obligations. Assuming a duration of 10 years for the assets and liabilities (no duration mismatch), a 50-basis point difference[10] in the changes of the interest rates used for the valuation of the assets on the one hand and liabilities on the other hand would result in an income impact of CU 5 billion. It is important to understand that these differences in rate changes have no impact on the performance of the insurer or the underlying insurance policies: the financial instruments are expected to accrete to the par value of CU 100 billion and the discounted liability will accrete to the insurers obligation of CU 100 billion. Hence, it can be argued that reflecting this change in the income statement does not provide decision-useful information to the users of the financial statements of insurers (calculation: notional balance times duration times rate).[11]

## Arguments against using OCI

36. There are a number of reasons why the boards may not want to record changes in the insurance liability arising from changes in discount rate in OCI:

    (a) Requiring the impact of changes in the discount rate to be recorded in profit or loss would be consistent with the requirement to record changes in the estimates of cash flows in profit or loss. Presenting all changes in the liability in profit or loss is arguably less complex for both users and preparers.

    (b) To fully understand the performance of an insurer in any given reporting period, users will need to analyse both the amounts presented in profit or

[10] For 30 year corporate A rates, the average change over 8 quarters of 2009 through 2010 was 42 basis points; the average change in 2009 was 50 basis points and the average change in 2010 was 34 basis points.
[11] From the Geneva Association Insurance and Finance Newsletter, February 2012.

loss and the amounts presented in OCI. Some are concerned that users may not consider the amounts presented in OCI.

(c) Economic mismatches arising from:

(i) duration mismatches;

(ii) credit spreads;

(iii) options and guarantees

are reported in OCI rather than profit or loss. Some argue that this is less transparent to users of financial statements.

(d) Reporting changes in the insurance liability arising from changes in interest rates in OCI does not eliminate all accounting mismatches. Accounting mismatches will arise:

(i) in profit or loss if the assets backing insurance contracts are measured at FVPL; or

(ii) in equity if the assets backing insurance contracts are measured at amortised cost.

(e) One of the axioms of the insurance contracts project is that the accounting model should be based on current estimates, rather than carrying forward estimates made at contract inception. Using OCI to record the impact on the insurance liability from changes in the discount rate has the effect of locking in the impact of the discount rate in the income statement (ignoring loss recognition which is discussed in Agenda Paper 2D/81D).

37. When considering the use of OCI for financial liabilities and financial assets under financial instruments guidance, some have expressed concern that using OCI may result in earnings management. The holder of a financial instrument often has a choice of when to pay its liability or sell its asset and therefore, when gains or losses are recycled to the income statement. However, because the insurance liability is paid upon the occurrence of an insured event, over which the insurer does not have control, an insurer does not have the ability to pay the liability

whenever it chooses. As such, the staff believes that concerns about possible earnings management opportunities are not as significant for insurance contracts.

38. Finally, those who oppose the use of OCI to present changes in the insurance liability arising from changes in discount rate note that if the financial assets backing the insurance liability are also recorded at fair value through profit or loss then:

    (a) All economic mismatches are reported in profit or loss;

    (b) All accounting mismatches (except the credit spread) are eliminated.

## Staff views

39. The staff believe that recording the impact from the changes in the discount rate applied to insurance liabilities in OCI would address the concerns raised by respondents to the ED/DP. That is:

    (a) Accounting mismatches would be reduced if the assets backing insurance liabilities are measured at FVPL or amortised cost. This is particularly the case for the FASB and if the IASB decides to introduce a third category of financial asset that is measured at fair value through OCI.

    (b) Relevant information about an insurer's performance would be presented because:

        (i) Short-term movements in the discount rate which may reverse over time will not impact the profit or loss, thus reflecting the long-term nature of insurance business.

        (ii) The insurers underwriting results will be transparent in profit or loss and will not be overshadowed by movements in the market interest rate.

        (iii) Information about economic mismatches (for example duration mismatches and credit spreads) will be presented in a transparent manner in OCI.

| Question 1: Recording the impact of changes in the discount rate to OCI |
| --- |
| What are the boards views regarding whether the impact on the insurance liability arising from changes in the discount rate should be recorded in OCI? |

### *Should elements of expected cash outflows that are sensitive to interest rates also be recorded to OCI?*

40. There are a myriad of factors that influence the timing and amount of the expected cash flows of an insurer. Some of these factors are sensitive to changes in interest rates either because of contractual features, behavioural elements or market driven. For example, the following are likely to be interest rate sensitive:

    (a) Assumptions about interest rate guarantees and options (contractual feature). Some insurance contracts contain an embedded guarantee of a minimum crediting rate. Such guarantees limit the policyholder's exposure to interest rate declines, while preserving the policyholder's ability to gain from interest rate rises. Consequently, assumptions about guarantees and options are interest sensitive.

    (b) Lapse/surrender assumptions, including assumptions regarding annuitization (behavioral element). Policyholder surrender behaviors are dependent on many factors including interest rates[12]. For some products (e.g., annuities, endowments, universal life, etc.) in some jurisdictions the lapse rate assumptions are highly dependent on the interest rates[13]. When the interest rates increase, the lapse rates also increase because of the

[12]Lapse rate assumptions are also impacted by economy growth rates, unemployment rates, foreign exchange rates, seasonal effects, the difference between reference market rates and policy crediting rates, and age and gender of policyholders as well as income, occupation, premium frequency and policy age since issue date of policyholder.

[13] Interest rate movements also affect the cash flows of assets and liabilities, because interest-rate-dependent surrender and lapse rates and prepayment rates increase the sensitivity of the duration mismatch. When interest rates go down, the surrender and lapse rates of liabilities also go down, but the prepayment rates of assets go up. In this case the duration of liability cash flows increases, and the duration of asset cash flows decreases. A lower lapse rate drives up the market value of the liability curve, and a high prepayment rate limits reinvestment opportunity, driving down the market value of assets.

increased gap between the interest rates and the expected product crediting rates. When the interest rates decrease, the lapse rates also decrease. For other products (e.g., long-term care) there is little correlation between the change in interest rates and lapse rate assumptions.

41. If the effect of discount rate changes is presented in OCI, should changes in the insurance liability arising from interest sensitive cash flow assumptions also be presented in OCI?

42. The effects of change in the insurance liabilities due to interest rate changes are either contractual (e.g., they change the cash flows) or behavioral (i.e., they change the decisions) reactions to modeled outcomes; they are not necessarily explicit free-standing assumptions. A change in assumptions about interest rates is what elicits a behavioral response in the model.

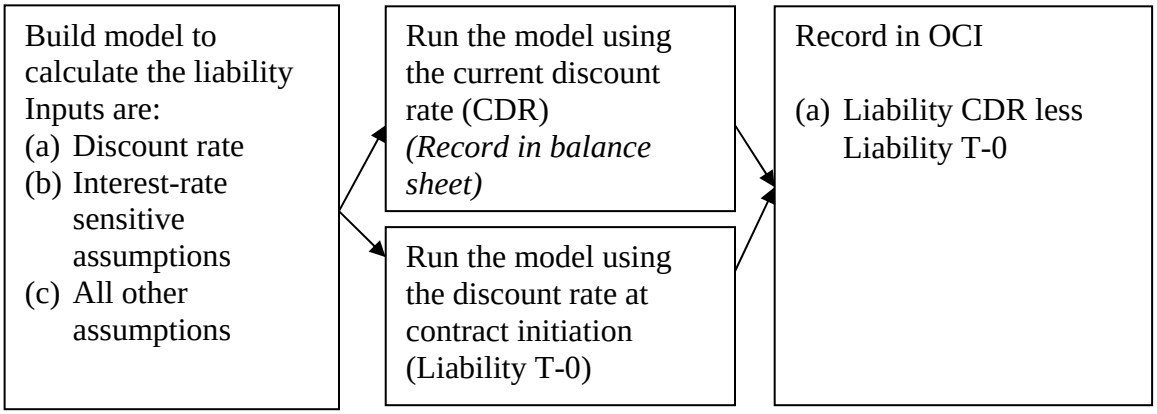
43. However, it is important to recognize that there is not necessarily a causal relationship between changes in interest rates and changes in interest sensitive assumptions. That is, even though interest rates are a component to estimating a discount rate and also a component to estimating the timing and amount of cash flows, recognizing changes in the discount rate due to changes in interest rates through OCI does not necessarily mean that changes in cash flows due to changes in interest rates should also go through OCI.

44. Some products have attributes that make policyholder's behaviour more responsive to changes in overall market conditions, particularly interest rates, than other products. Policyholders may be inclined to make decisions that align closer to traditional investment decisions (e.g., move investments to capture the best return, subject to risk tolerance levels), than to traditional insurance (e.g., pricing is locked for life and lapses occur when the policyholder can no longer afford the coverage or they decide they no longer need the coverage). Traditional insurance has a longer term view and is not directly linked to short-term interest rate movements. Hence, policyholders that use nontraditional investment-type products to obtain insurance protection may more often make decisions about continuing their

insurance policy based on expectations of interest rate activity. Therefore interest rate changes can lead to changes in expectations of policyholder behavior. Said another way, it is unlikely that expectations of policy lapses remain identical before and after a significant change in expectations of the market for interest sensitive products.

45. Where behavioral elements, such as lapsing of some policies, may be an output of the model based on relationships between contractual rates and forecasted or assumed interest rates, isolating the behavioral responses could be difficult as it is dependent on all the other assumptions in the model.

46. The following diagram illustrates how an insurer would calculate the effect of changes in both interest rate and interest sensitive cash flows of the insurance liability.




47. Modelling insurance liabilities is an inherently complex undertaking. Contributing to this complexity is the myriad of factors that influence the timing and amount of cash outflows. When considering how the total value of an insurance liability changes from one period to the next, it is mathematically possible to assign components of that value change to isolated factors (e.g., the amount of change due to changes in mortality rates or estimated interest rates). However, when the total value of an insurance liability is performed using a stochastic estimation technique (e.g., a Monte Carlo simulation), such an exercise could be particularly complex. Isolating the changes in value to specific factors would require changing one input

at a time, performing the simulation, quantifying the change, then repeating the simulation for the next isolated input. Added complexity exists when multiple factors are correlated or contribute together to behavioral elements of the model that would not be affected if the factors are changed one at a time.

48. If insurers were required to disconnect the changes in the liability due to a change in the discount rate from the changes in the liability due to changes in assumptions that are sensitive to interest rates there could be a portion of the change in value that would not necessarily be explainable.

### *Reasons against recording the impact from changes in interest sensitive assumptions to OCI*

49. Recording the impact on the liability from changes in interest-rate sensitive assumptions in profit or loss is consistent with the treatment of other cash flow assumptions. Although the change in assumptions may be short-term (e.g., as interest rates change the assumptions will change), the change is indicative of the increased exposure the insurer bears at that time.

50. When an insurer uses the building block model to measure a contract, it considers the expected present value. In principle, the expected present value considers all scenarios, including all scenarios in which an option or guarantee comes into the money. Thus, the building block model captures both the time value and intrinsic value of embedded guarantees. One of the project axioms adopted by the boards is that an ideal accounting model should reflect both the intrinsic value and time value of options and guarantees embedded in insurance contracts. Arguably, reporting the effect of changes in the values of these options and guarantees in profit or loss is the most understandable and transparent way to report them and is consistent with the treatment of all free standing derivatives.

51. Finally, including only changes in the liability arising from changes in the discount rate in OCI is arguably easier for users to understand.

### *Reasons to record the impact from changes in interest sensitive assumptions to OCI*

52. Many constituents contend that the impact on interest sensitive assumptions from short term movements in interest rates should not impact the income statement because it would not be representative of the long-term nature of insurance business and is not necessarily indicative of the insurers core results. This is consistent with the objective to recognize the long-term nature of insurance business and for the financial statements to reflect the insurers core operations.

53. Some contend that it would be inconsistent to require insurers to report in profit or loss one source of volatility arising from changes in interest rates (e.g., embedded guarantees of minimum interest rates) if they are required or permitted to use OCI to report other sources of volatility arising from changes in the interest rate. Allowing the impact from changes in interest sensitive assumptions to be recorded in OCI would effectively result in all amounts presented in profit or loss being based on interest rates at inception and all assumptions would be internally consistent.

54. In addition, some believe it would be inconsistent with some aspects of derivative accounting to require an insurer to recognize in profit or loss changes in the time value and intrinsic value of minimum interest rate guarantees embedded in insurance contracts if those guarantees were out of the money at the inception date.

    (a) Under US GAAP, the fair value of an option derivative that is bifurcated under ASC Topic 815 represents only time value (and no intrinsic value) if it is out of the money at inception. If the effectiveness of that derivative in a hedging relationship is assessed based on the options terminal value at maturity (as discussed in DIG Issue G-20), then all changes in its fair value are reported in OCI and are reclassed into earnings only when the hedged transaction impacts earnings. If the option goes into the money, its fair value will also include an intrinsic value element which is also recognized in OCI as that intrinsic value changes.

(b) IFRS does not require an entity to bifurcate an embedded interest rate guarantee and account for it at fair value through profit or loss if it is out of the money at the inception date.

55. For example, an insurer issues an insurance contract that guarantees a 2.5% return when market rates are 6% (the contract is out of the money). As market rates come down the probability that the guarantee will become a factor increases and therefore the value of the guarantee increases even though the guarantee is still out of the money. Some believe if the impact of the change in the discount rate is recorded to OCI then the impact of the change in the value of the guarantee, while it is out of the money, should also be recorded to OCI.

56. Finally, separating the effects of interest sensitive cash flow assumptions from the effect of changes in interest rates is costly and complex as indicated in paragraph 47. The complexity and costs to isolate the changes in value to specific factors may outweigh the benefits.

### *Staff views*

57. The FASB staff believe that changes in the insurance liability that arise from changes in interest sensitive assumptions should be recorded to OCI.

58. The IASB staff believe that changes in the insurance liability that arise from changes in interest sensitive assumptions should be recorded in profit or loss.

| **Question 2: Recording the impact of changes in interest sensitive assumptions** |
| --- |
| What are the boards views regarding whether changes in the insurance liability that arise from changes in interest sensitive assumptions should be recorded :<br><br>A. In OCI?<br><br>B. In profit or loss? |

### Require or permit

59. If the boards decide that the impact on the insurance liability from the change in the discount rate should be presented in OCI, the boards also need to decide whether to *require* or *permit* some changes in the insurance liability arising from changes in the discount rate to be presented in profit or loss.

60. It is important to keep in mind the following:

    (a) For insurers that record their assets at fair value through net income, recording changes in the discount rate through OCI would introduce an accounting mismatch.

    (b) For insurers that record their assets at fair value through OCI, recording changes in the discount rate through OCI would reduce any accounting mismatch.

    (c) For insurers that record their assets at amortized cost, recording changes in the discount rate through OCI would reduce the accounting mismatch in profit or loss (although an accounting mismatch still arises in equity)

61. The staff recognize that the assets backing a portfolio of insurance contracts include assets with a mix of measurement attributes (fair value–profit or loss, fair value-OCI and amortized cost).

62. The staff analyzed several scenarios if the boards decide that the impact on the insurance liability from the change in the discount rate should be presented in OCI:

    (a) require the use of OCI for the impact of changes in the discount rate

        (i) in all situations;

        (ii) allow entities to elect to record this impact in profit or loss if it eliminates or significantly reduces an accounting mismatch

    (b) require the use of profit or loss for the impact of changes in the discount rate:

(i) Permit the use of OCI (in all situations or if it eliminates or significantly reduces an accounting mismatch)

(c) require the use of OCI to present changes in the insurance liability arising from changes in discount rate unless presenting those changes in profit or loss would eliminate or significantly reduce an accounting mismatch.

### *Require the use of OCI for the impact of changes in the discount rate (in all situations):*

63. An advantage of requiring the use of OCI is that it would provide comparability amongst insurance companies. However, requiring the use of OCI in all circumstances could result in accounting mismatches if the assets backing the insurance liability are measured at fair value through profit or loss. Therefore the staff do not believe this is a viable alternative.

### *Require the use of OCI for the impact of changes in the discount rate and allow entities to elect to record this impact in profit or loss if it eliminates or significantly reduces an accounting mismatch*

64. There is a precedent in both IFRS and US GAAP to permit entities to elect fair value through profit or loss to measure financial assets and liabilities.

65. In IFRS 9, the option to designate a financial instrument at fair value through profit or loss is restricted to circumstances in which doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as an 'accounting mismatch').[14]

66. That option was carried over to IFRS 9 from IAS 39, and the Basis for Conclusions to IAS 39 explains:

BC75B The Board concluded that accounting mismatches arise in a wide variety of circumstances. In the Boards' view, financial reporting is best served by

[14] The fair value option can also be used if a group of financial assets or liabilities is managed on a fair value basis.

providing entities with the opportunity to eliminate perceived accounting mismatches whenever that results in more relevant information....Hence, the Board decided not to develop detailed prescriptive guidance about when the fair value option could be applied (such as requiring effectiveness tests similar to those required for hedge accounting) in the amendment on the fair value option….."

67. ASC Topic 825-10-15-4 also allows entities to elect the fair value option for a recognized financial asset and financial liability unless otherwise indicated[15]. In addition, ASC Topic 825-10-25-2 indicates that the decision about whether to elect the fair value option shall be applied instrument by instrument without electing it for other identical items, except in specified circumstances[16].

68. The basis for conclusions of FASB Statement No. 159, The Fair Value Option for Financial Assets and Financial Liabilities, explains why the FASB decided to include a fair value option for financial assets and financial liabilities:

    (i) A fair value option would enable entities to mitigate the volatility in earnings that results from using different measurement attributes in reporting related financial assets and financial liabilities..

    (ii) A fair value option would enable entities to achieve consistent accounting and, potentially, an offsetting effect for the changes in the fair values of related assets and liabilities without having to apply complex hedge accounting provisions, thereby providing greater simplicity in the application of accounting guidance.

69. In the FASB's Accounting for Financial Instruments Project, the FASB tentatively decided that when financial assets will be used to settle nonrecourse financial liabilities, an entity should measure the financial liabilities consistently with the

[15] An exception to being permitted to elect fair value is the rights and obligations under an insurance contract where the insurance contract is not a financial instrument (because it requires or permits the insurer to provide goods or services rather than a cash settlement) and the insurance contract's terms permit the insurer to settle by paying a third party to provide those goods or services. .

[16] If the fair value option is applied to an eligible insurance or reinsurance contract, it shall be applied to all claims and obligations under the contract. In addition, if the fair value option is elected for an insurance contract (base contract) for which integrated or nonintegrated contract features or coverages (some of which are called riders) are issued either concurrently or subsequently, the fair value option also must be applied to those features or coverages. The fair value option cannot be elected for only the nonintegrated contract features or coverages, even though those features or coverages are accounted for separately.

measurement of the related financial assets, taking into account the same factors in determining each amount. For example if the assets are measured at fair value, then the liability should be measured at fair value.

70. Based on the above, the staff believe that this alternative is consistent with the fair value option afforded to companies in measuring financial instruments. In addition, this alternative provides insurers with flexibility in reducing accounting mismatch between their liabilities and financial instruments.

71. However, this alternative makes OCI the default rather than profit or loss and would require insurers to prove that an accounting mismatch is eliminated or significantly reduced by recording the impact of changes in the discount rate in profit or loss. In addition, as with any option, this alternative could reduce comparability amongst companies.

### *Require the use of profit or loss and permit the use of OCI for the impact of changes in the discount rate (in all situations or if doing so eliminates or significantly reduces a measurement or recognition inconsistency)*

72. Requiring the use of profit of loss would be consistent with the boards' tentative decisions on requiring other changes in the insurance contract liability to be recorded to profit or loss. Permitting the use of OCI for the impact from changes in the discount rate in all situations provides the insurer with flexibility in reducing the accounting mismatch. However an unrestricted option reduces comparability. In most accounting guidance, the boards have restricted the use of options to specific circumstances. The staff do not believe it is appropriate to have an option to use OCI without specified parameters.

73. The reason for providing an option to use OCI would be to eliminate accounting mismatches, and the most significant of these arises when the assets backing insurance contracts are financial assets measured at fair value through OCI or amortized cost. An insurer that measures financial assets at fair value through OCI

or amortized cost under the FASB's and IASB's financial instruments guidance should have the ability to eliminate the resulting accounting mismatch:

(a) by electing to use the fair value option for the financial asset; or

(b) by electing to present in OCI some changes in the measurement of the insurance contract liability.

74. The staff believe that it would be logical to use the same criteria for either approach to eliminating the mismatch. The staff expect that if insurers were given an option to present in OCI some changes in the liability in practice this would be elected mostly for portfolios where all or most of the assets are measured at amortized cost or fair value through OCI, and that in turn would be restricted by the criteria in the financial instruments guidance in US GAAP and IFRS for determining when financial assets should be measured at something other than fair value through profit or loss.

75. The staff note that requiring insurers to present changes in the insurance liability arising from changes in the discount rate in profit or loss and permitting or requiring the use of OCI in some situations would enable insurers to reduce any accounting mismatch. However, it would not meet the second objective of using OCI because it would not:

(a) Present information in the statement of comprehensive income in a way that reflects the long term nature of insurance; or

(b) Reflect the insurers' core operations in net income.

### *Require the use of OCI for the impact of changes in the discount rate unless presenting those changes in profit or loss would eliminate or significantly reduce an accounting mismatch*

76. In order to address concerns regarding the lack of comparability and transparency when an option is given, the boards could require insurers to present changes in the insurance liability arising from changes in the discount rate in OCI unless

presenting those changes in profit or loss would eliminate or significantly reduce an accounting mismatch.

77. This could have the impact of requiring OCI when the majority of assets backing the insurance liabilities are measured at FV-OCI or amortised cost and requiring the use of profit or loss when the majority of assets backing the insurance liabilities are measured at fair value with changes recognized in profit or loss. Thus, this approach would also ensure that any accounting mismatch would be reduced.

78. However, this approach is potentially more complex for preparers as it would require them to assess whether presenting a change in profit or loss would eliminate or significantly reduce an accounting mismatch.

### *Staff views*

79. The staff believe that insurers should be required to present changes in the insurance liability arising from changes in discount rate in OCI unless presenting those changes in profit or loss would eliminate or significantly reduce an accounting mismatch.

| Question 3: Permit or Require |
| --- |
| What are the boards views regarding whether insurers should present changes in the insurance liability arising from changes in discount rate in OCI unless presenting those changes in profit or loss would eliminate or significantly reduce an accounting mismatch? |

## Unit of account

80. If the boards decide to permit or require the use of profit or loss to record the changes in the insurance liability arising from changes in the discount rate, the boards also need to decide on the unit of account that would be used when the determination to use profit or loss or OCI is made. The staff considered the following levels:

    (a) Entity level

(b) Portfolio level

(c) Product level

(d) Contract level

(e) Allocation of contracts

81. If determined at the entity level, there would be consistency in the treatment for all the insurer's insurance contract liabilities. This could be deemed less complex and easier for users to understand. However, determining when to use profit or loss or OCI at an entity level could result in the insurer continuing to report significant accounting mismatches.

82. One of the project assumptions is that, in general, the final standard will measure insurance contracts at the portfolio level. Therefore the staff believe that the assessment of whether an accounting mismatch is reduced or eliminated could take place at the portfolio level.

83. However, some constituents may argue that the portfolio level may be too high because the portfolio could contain multiple lines of business and products that have different characteristics. For example, certain lines of business within a portfolio may have products with guarantee features which the insurer hedges; in this situation, it may be more appropriate for the insurer to recognize the impact from the change in the discount rate through net income for lines of business with guarantee features. In that case, the line of business level or product level within a portfolio could be a more appropriate unit of account because then an insurer could consider the characteristics of the liabilities and the assets backing the insurance contracts and better minimize the accounting mismatch that is caused by the different classification of the change in the asset values.

84. However, insurers change the features of their products on a regular basis. Allowing insurers to determine whether or not to use profit or loss to record the changes in expected cash flows of their insurance liabilities at a product level could result in profit or loss being used for certain issue years and not being used

for other issue years because the features have changed slightly. The staff believe this would be confusing to users of the financial statements.

85. To be consistent with the fair value option for financial instruments, the assessment of whether an accounting mismatch is significantly reduced or eliminated could be made at a contract level. In theory, this would provide the insurer with maximum flexibility to eliminate or significantly reduce accounting mismatches.

86. However, insurers do not match their individual contracts to individual financial assets but rather a pool of financial assets back a group of insurance contracts. In addition, the various assumptions made in determining the insurance contract liability are made at a higher level than the contract (e.g., the portfolio). Although these assumptions are sometimes pushed down to the individual contracts this is not true in many cases, especially non-life insurance contracts. This is particularly evident for insurers assumptions regarding timing of occurrence and payout of benefits or claims for a portfolio of insurance contracts but not for specific insurance contracts. Therefore, an insurer cannot determine whether there is an accounting mismatch at the contract level.

87. In determining whether changes in the insurance liability for an individual contract should be presented in OCI or profit or loss, an insurer could consider the overall mix of its assets and allocate contracts based upon that mix. If, for example, 40 per cent of the assets backing a particular group of contracts were measured at FVPL, the insurer would aim to ensure that 40 per cent of that group of insurance contracts were also measured at FVPL. As the mix of assets change, the insurer would balance the liabilities presented in OCI or profit or loss by designating new contracts to one of the two categories.

88. Some staff believe this approach could be operationally more complex and it could be difficult for users of the financial statements to understand the impact of the change in discount rates on a portfolio of contracts. In addition, these staff believe that allocating insurance liabilities for specified contracts could have negative

consequences. A portfolio mix is a point in time measure; continual rebalancing will change that mix. When insurance liabilities are settled, insurers do not identify the investments to be sold with either the fair value through OCI or fair value through profit or loss category. Therefore an insurer could end up with insurance policies designated to OCI or profit or loss with insufficient assets in the corresponding pool, thus resulting in an accounting mismatch going forward. Requiring insurers to designate new contracts to either the OCI or profit or loss pool based on the current asset mix, regardless of whether the insurer purchases assets that perfectly match the characteristics of those new contracts, could result in inconsistent accounting with how an insurer manages its contracts.

### *Staff views*

89. In considering the reasons for allowing insurers to record the impact from changes in the discount rate in OCI, the FASB staff believe that determination of when to use OCI (or profit or loss) should be at the portfolio level.

90. The IASB staff believe that determination of when to use OCI (or profit or loss) should be an allocation at the individual contract level based upon the overall mix of its asset portfolio.

| **Question 4: Unit of Account** |
| --- |
| What are the boards views regarding the unit of account that should be used when determining whether changes in the insurance liability arising from changes in interest rates should be presented in profit or loss or OCI<br><br>A. Portfolio level?<br><br>B. Allocation of contracts? |

### Frequency of election

91. If the boards decide to permit or require changes in the insurance liability arising from changes in the discount rate to be presented in profit or loss, the boards also need to decide when the determination is made and if that determination may be changed.

92. This question is pertinent whether the boards decide to permit the use of profit or loss or whether it is required. For example, assume a portfolio where the insurance liability was previously backed predominately by assets held at fair value through OCI and therefore the insurer recognized the effect of the discount rate on those insurance liabilities in OCI. If those liabilities are now backed by assets with fair value through profit of loss, there would be an accounting mismatch if the effect of the discount rate on those insurance liabilities remained in OCI.

93. ASC Topic 825 states that the fair value election is irrevocable (unless a new election date occurs). An entity may choose to elect the fair value option for an eligible item when the entity first recognizes the eligible item or an event that requires an eligible item to be measured at fair value at the time of the event but does not require fair value measurement at each reporting date after that, excluding the recognition of impairment under lower-of-cost-or-market accounting or other-than-temporary impairment. Examples of such events include business combinations, consolidation or deconsolidation of a subsidiary or variable interest entity, and significant modifications of debt.

94. The option to designate a financial asset or financial liability at fair value through profit or loss under IFRS 9 is made at initial recognition and is irrevocable.

#### *Staff views*

95. The staff believe that the determination of whether changes in the insurance liability arising from changes in discount rates should be presented in profit or loss should be made for new portfolios.

96. In addition, the staff believe that an entity should only be allowed to change where the impact from changes in financial variables is recorded if the fundamental strategy for the portfolio were to change resulting in a new accounting mismatch. The staff believe this would be rare.

97. The staff believe that if the unit of account used is an allocation of individual contracts, then the determination of whether to use OCI or profit of loss should be made at contract inception. To reduce the opportunity for earnings management the staff believe that the decision should be irrevocable. The staff note that any new accounting mismatch that arises after the initial recognition could be reduced by appropriate designation of new insurance contracts.

**Question 5: Frequency of Election**

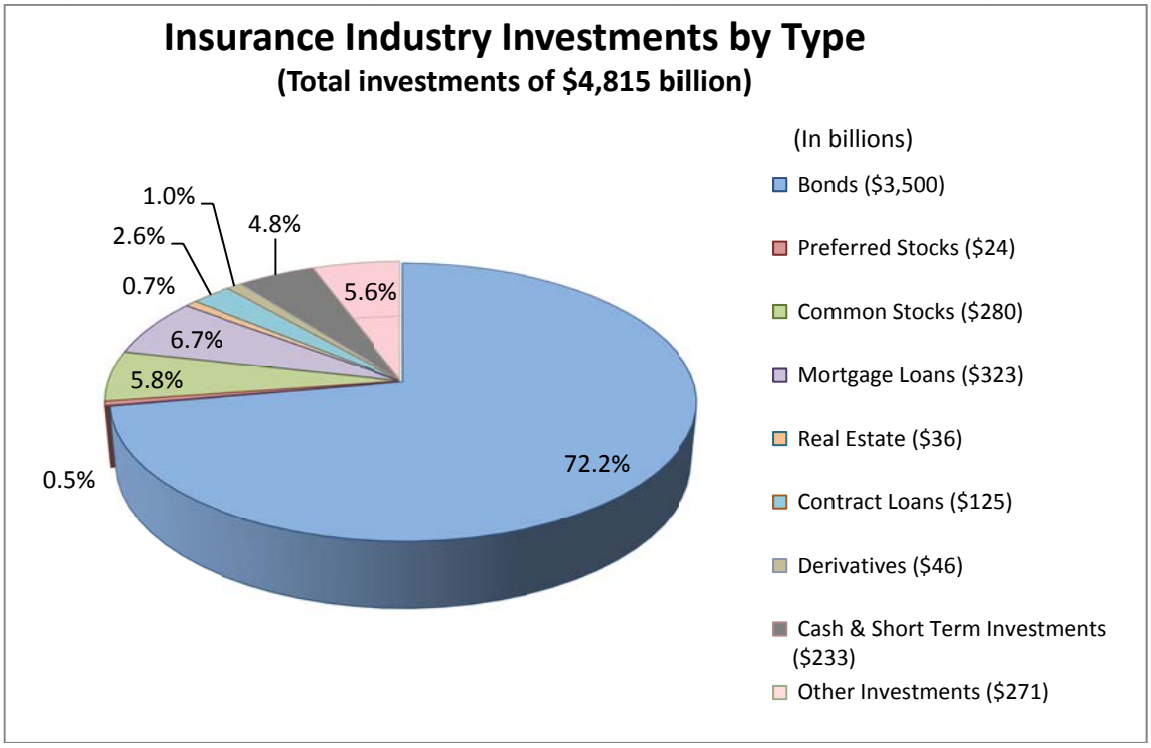
What are the boards views regarding whether the determination to use OCI [or profit or loss] is:

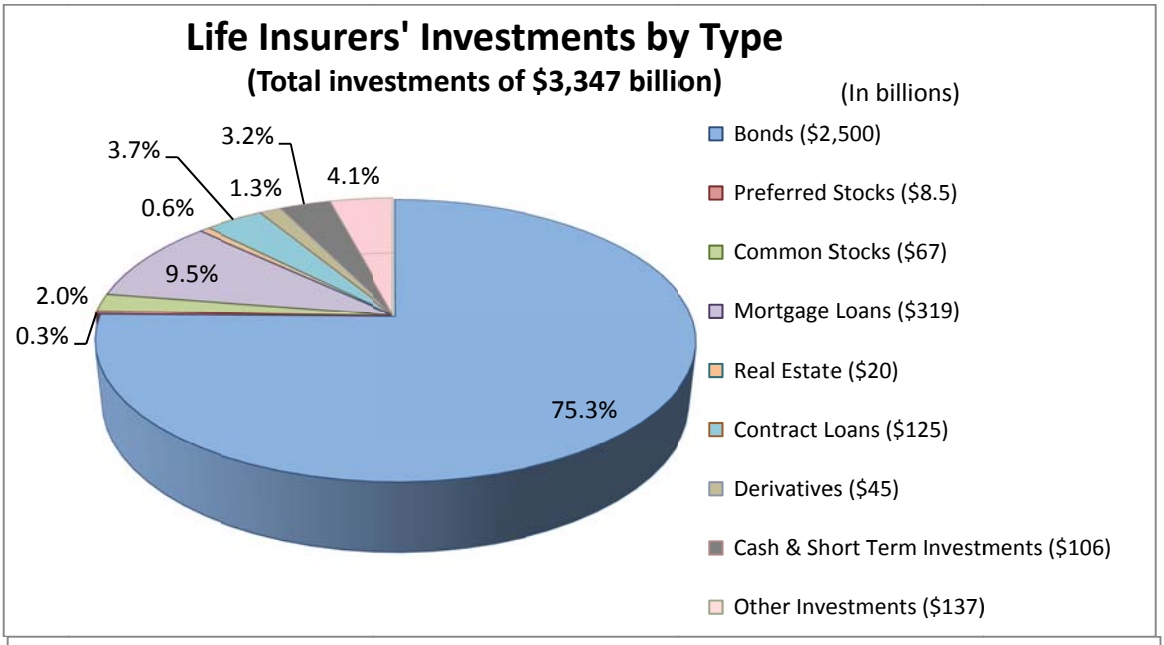
1. Irrevocable?

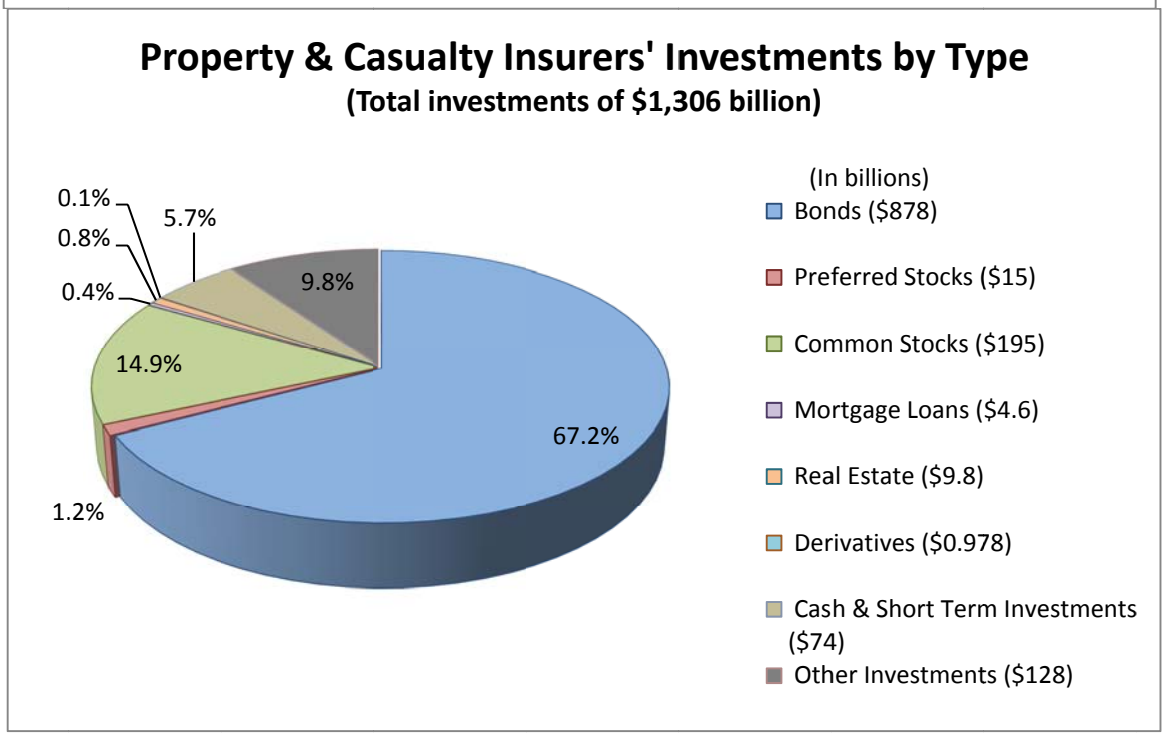
2. Can be changed if fundamental strategy for the portfolio were to change resulting in a new accounting mismatch?

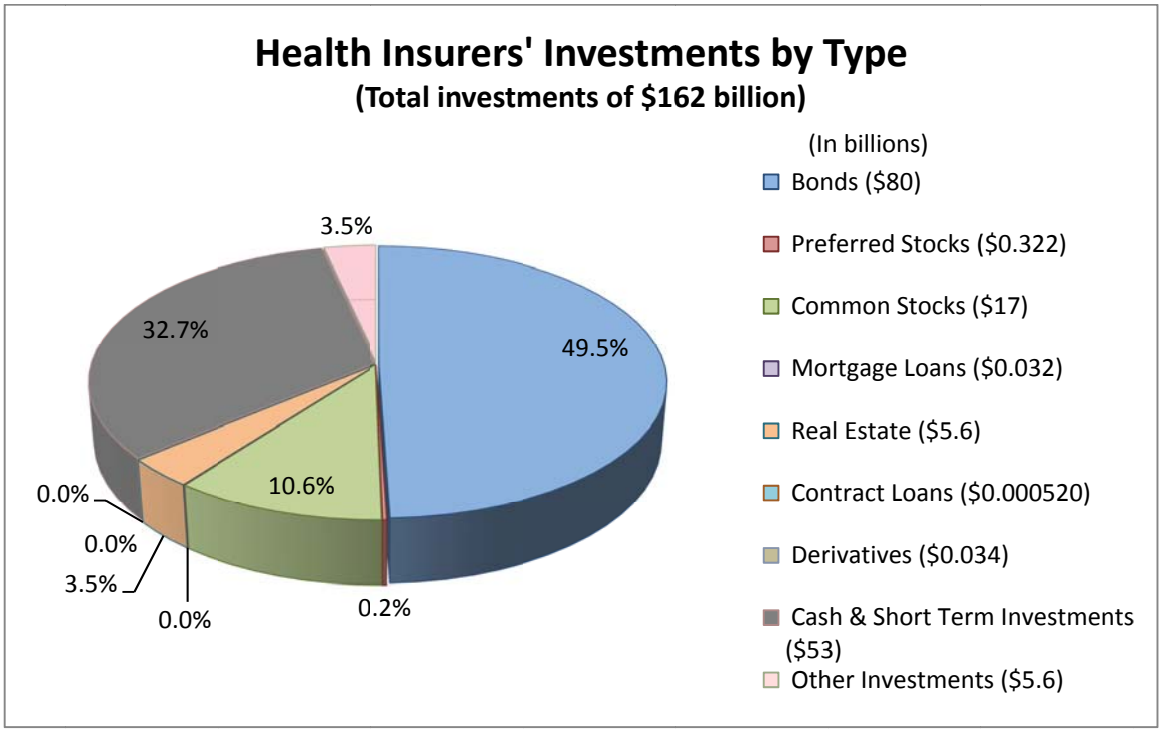
## Appendix A: US Insurance Industry Investments

A1. Below are graphs showing the breakdown of investment types by the US insurance industry in total and separately for life insurers, property/casualty insurers and health insurers as of September 30, 2011 (latest available information). This data includes only the investments held in the insurers general account and not investments that are segregated and directly linked to specific insurance contract portfolios. The mix within the segregated (separate) accounts may be substantially different given that the policyholders account is directly impacted by the performance of those assets (e.g., more investments in equity securities and real estate).




Life Insurers' Investments by Type
(Total investments of $3,347 billion)
(In billions)
3.7%
3.2%
1.3%
4.1%
0.6%
9.5%
2.0%
0.3%
75.3%
Bonds ($2,500)
Preferred Stocks ($8.5)
Common Stocks ($67)
Mortgage Loans ($319)
Real Estate ($20)
Contract Loans ($125)
Derivatives ($45)
Cash & Short Term Investments ($106)
Other Investments ($137)


Property & Casualty Insurers' Investments by Type
(Total investments of $1,306 billion)
(In billions)
0.1%
5.7%
0.8%
0.4%
9.8%
14.9%
67.2%
1.2%
Bonds ($878)
Preferred Stocks ($15)
Common Stocks ($195)
Mortgage Loans ($4.6)
Real Estate ($9.8)
Derivatives ($0.978)
Cash & Short Term Investments ($74)
Other Investments ($128)


Health Insurers' Investments by Type
(Total investments of $162 billion)
(In billions)
Bonds ($80)
Preferred Stocks ($0.322)
Common Stocks ($17)
Mortgage Loans ($0.032)
Real Estate ($5.6)
Contract Loans ($0.000520)
Derivatives ($0.034)
Cash & Short Term Investments ($53)
Other Investments ($5.6)
49.5%
0.2%
10.6%
0.0%
3.5%
0.0%
0.0%
32.7%
3.5%

## Appendix B: Simplified Example

A2. The staff built a hypothetical investment portfolio of fixed income and equity securities that back a portfolio of insurance liabilities. The full example is included in Agenda Paper 2E/82E.

A3. The staff modeled four different scenarios using two different examples (3 year policy with claim payments made over15 years in varying amounts and a 15 year policy with a lump sum payment made in year 15) to show the impact on the statement of financial position and the statement of comprehensive income.

| | **Assets** | | **Liabilities** |
| --- | --- | --- | --- |
| | **Bonds** | **Equities** | **Change in discount rate** |
| **Scenario 1** | FV-OCI | FV-TPL | NI |
| **Scenario 2** | FV-OCI | FV-TPL | OCI |
| **Scenario 3*** | FV-OCI | FV-OCI | OCI |
| **Scenario 4** | FV-TPL | FV-TPL | NI |

*Scenario 3 is not shown in this simplified example but is included in Agenda Paper 2E/82E

A4. The staff assumed a yield curve for the discount rate that almost perfectly aligns with the change in the value of the bond portfolio for illustrative purposes. This results in the accounting mismatch being eliminated (or substantially reduced) when the change in the asset values and the change in the insurance liability attributable to changes in the discount rate are recorded in either profit or loss or OCI. To the extent that economic mismatches exist (duration, rate, or otherwise), those effects would be transparent regardless of whether the changes are reported in profit or loss or OCI.

A5. The following example shows the three scenarios if payments are made over 15 years and is based on the following assumptions:

(a) The premium received at the beginning of the contract is $10M; the present value of the expected cash flows at that time is $7.7M.

(b) 100% of the premiums is invested in bonds with maturities that are matched to the expected payments on the insurance liabilities

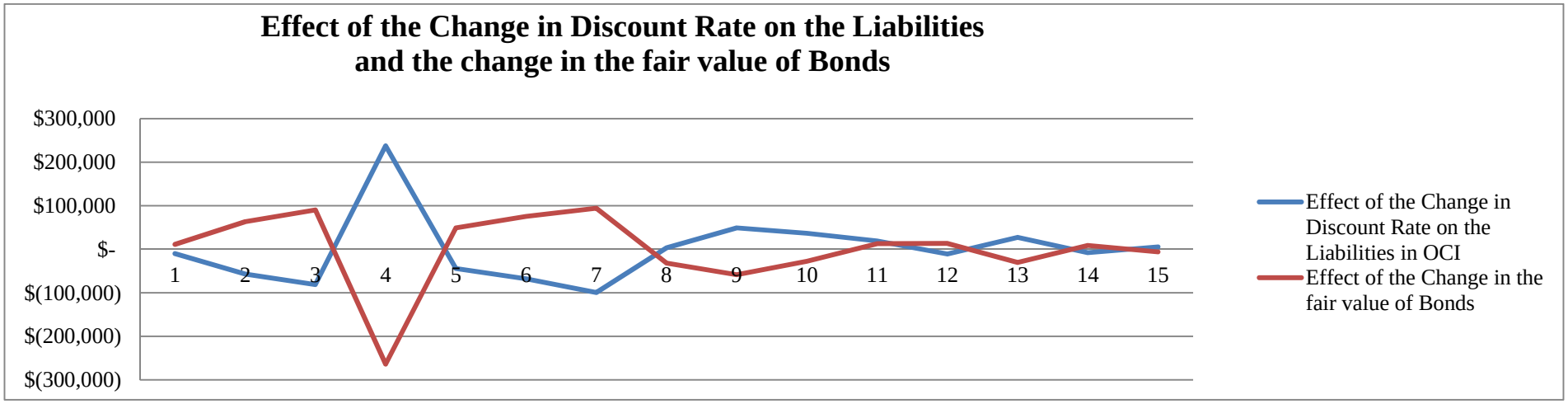
(c) Claim liabilities are paid over 15 years in varying amounts at the end of the period which are funded by bond maturities and investment income.

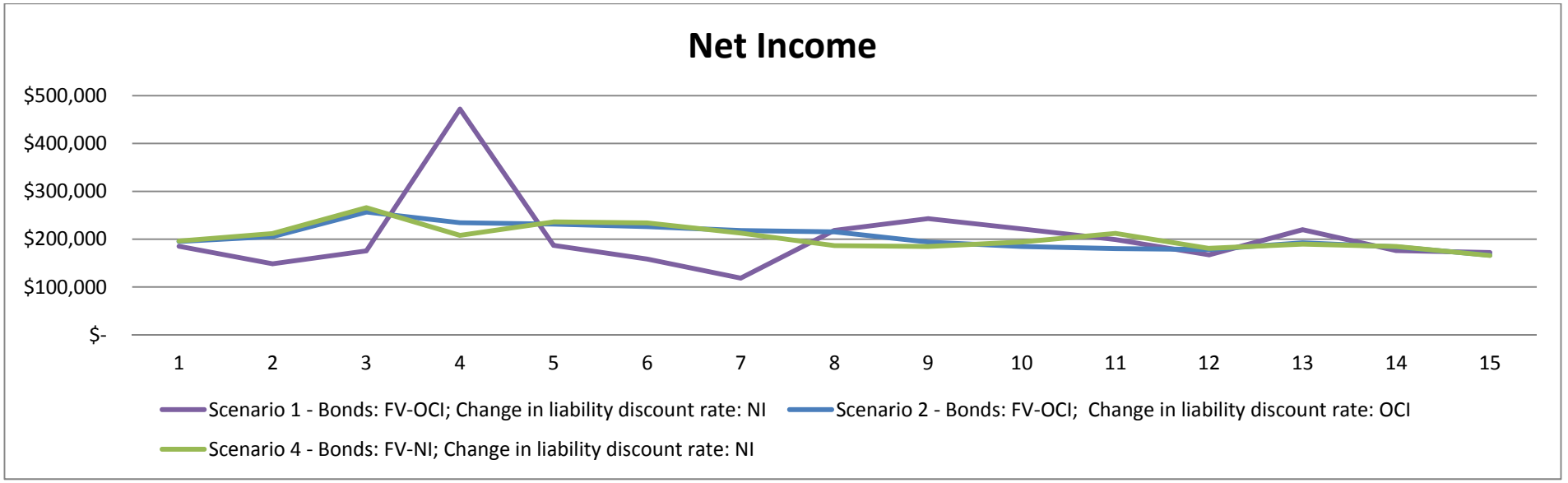
(d) Excess cash during a period that remains after fulfilling the entire liability for the period is not reinvested

(e) The evolution of prices for the hypothetical bond portfolio is based on the price returns of AA-rated corporate bond indices from 1996 through 2010.

(f) The discount rate is based on the 3-5 year bond yield adjusted to back out assets risks, not going below the risk free rate, for each year. The below table shows the movement in the discount rates and the effect of the change in the discount rate on the liabilities and the movement in the fair value of bonds. In addition, the table shows the overall change in the liability and the bonds based on claim payments.

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ending discount rate | 6.84% | 6.45% | 5.65% | 7.95% | 7.54% | 6.51% | 4.50% | 4.00% | 4.60% | 5.50% | 6.10% | 4.86% | 7.25% | 4.86% | 5.25% |
| Change in Discount Rate from Period to Period | -0.05% | -0.39% | -0.80% | 2.29% | -0.41% | -1.03% | -2.01% | -0.50% | 0.60% | 0.90% | 0.60% | -1.24% | 2.39% | -2.39% | 0.39% |
| Change in Bond Value from Period to Period | (9,990) | (56,951) | (81,213) | 237,682 | (44,158) | (67,941) | (99,451) | 3,370 | 49,064 | 36,696 | 18,971 | (11,028) | 27,355 | (7,826) | 5,421 |
| Change in Insurance Liability from Period to Period | 11,100 | 63,281 | 90,238 | (264,086) | 49,072 | 75,490 | 94,223 | (31,881) | (58,356) | (27,489) | 12,828 | 13,319 | (30,394) | 8,679 | (6,024) |


Effect of the Change in Discount Rate on the Liabilities and the change in the fair value of Bonds
$300,000
$200,000
$100,000
$-
$(100,000)
$(200,000)
$(300,000)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Effect of the Change in Discount Rate on the Liabilities in OCI
Effect of the Change in the fair value of Bonds


Net Income
$500,000
$400,000
$300,000
$200,000
$100,000
$-
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Scenario 1 - Bonds: FV-OCI; Change in liability discount rate: NI
Scenario 2 - Bonds: FV-OCI; Change in liability discount rate: OCI
Scenario 4 - Bonds: FV-NI; Change in liability discount rate: NI

A6. The following example shows the effect of using OCI if payments are made at the end of the contract and is based on the following assumptions:

(a) Premiums of $100,000 are received at the beginning of each year for 15 years

(b) Claim liabilities of $2.5 million are paid at the end of the 15th year

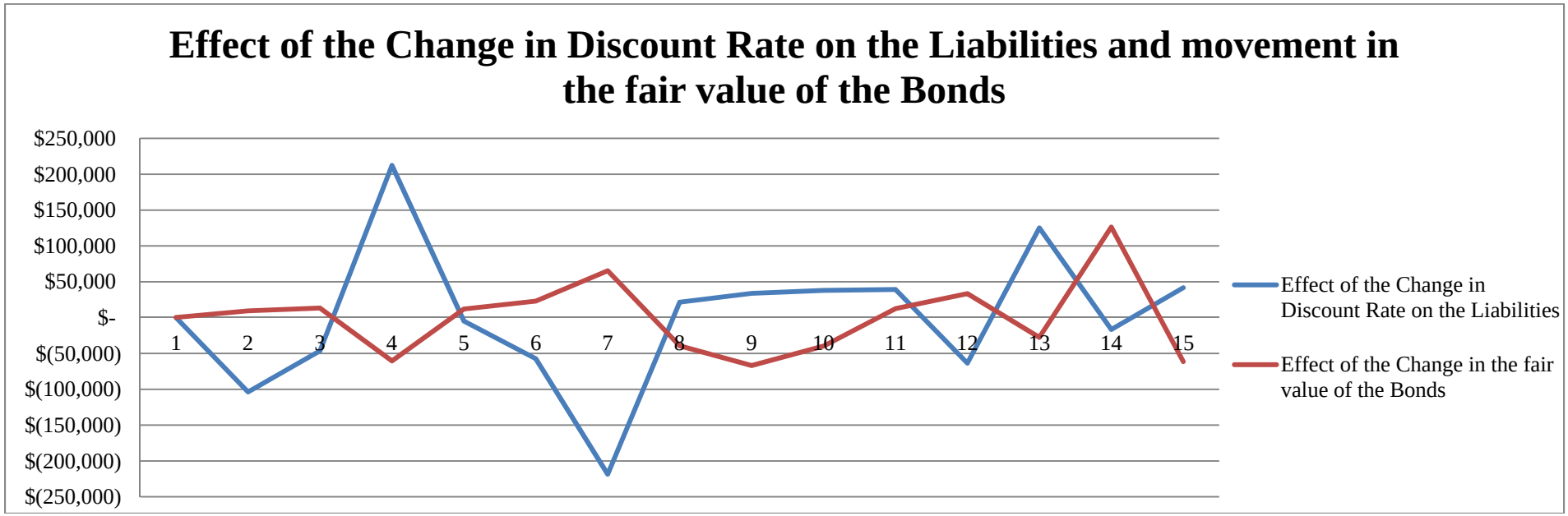
(c) 100% of the premiums is invested in bonds with maturities that are matched to the expected payments on the insurance liabilities

(d) Fixed income securities that mature at the end of the 15-year period are assumed to be sold if the year-end fair value exceeds the principal amount to be collected upon maturity. Otherwise, par is assumed to be collected on the maturing securities.

(e) The evolution of prices for the hypothetical bond portfolio is based on the price returns of AA-rated corporate bond indices from 1996 through 2010.

(f) The discount rate is based on the 3-5 year bond yield adjusted to back out assets risks, not going below the risk free rate, for each year. The below table shows the movement in the discount rates and the effect of the change in the discount rate on the liabilities and the movement in the fair value of bonds. In addition, the table shows the overall change in the liability and the bonds based on claim payments.

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ending discount rate | 7.52% | 6.30% | 5.87% | 8.30% | 8.22% | 7.52% | 5.23% | 5.36% | 5.60% | 5.89% | 6.23% | 4.87% | 6.90% | 5.63% | 6.34% |
| Change in Discount Rate from Period to Period | 0.00% | -1.22% | -0.43% | 2.43% | -0.08% | -0.70% | -2.29% | 0.13% | 0.24% | 0.29% | 0.34% | -1.37% | 2.03% | -1.26% | 0.70% |
| Change in Bond Value from Period to Period | 108,480 | 125,772 | 139,548 | 75,478 | 159,534 | 183,433 | 238,585 | 147,540 | 134,875 | 178,423 | 250,686 | 290,566 | 251,329 | 429,135 | (2,813,384) |
| Change in Insurance Liability from Period to Period | 99,785 | 210,887 | 161,418 | (88,506) | 138,014 | 200,520 | 372,396 | 143,972 | 144,113 | 153,407 | 166,588 | 284,676 | 112,689 | 272,388 | (2,366,725) |


Effect of the Change in Discount Rate on the Liabilities and movement in the fair value of the Bonds
$250,000
$200,000
$150,000
$100,000
$50,000
$-
$(50,000)
$(100,000)
$(150,000)
$(200,000)
$(250,000)
1
2
3
4
5
6
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8
9
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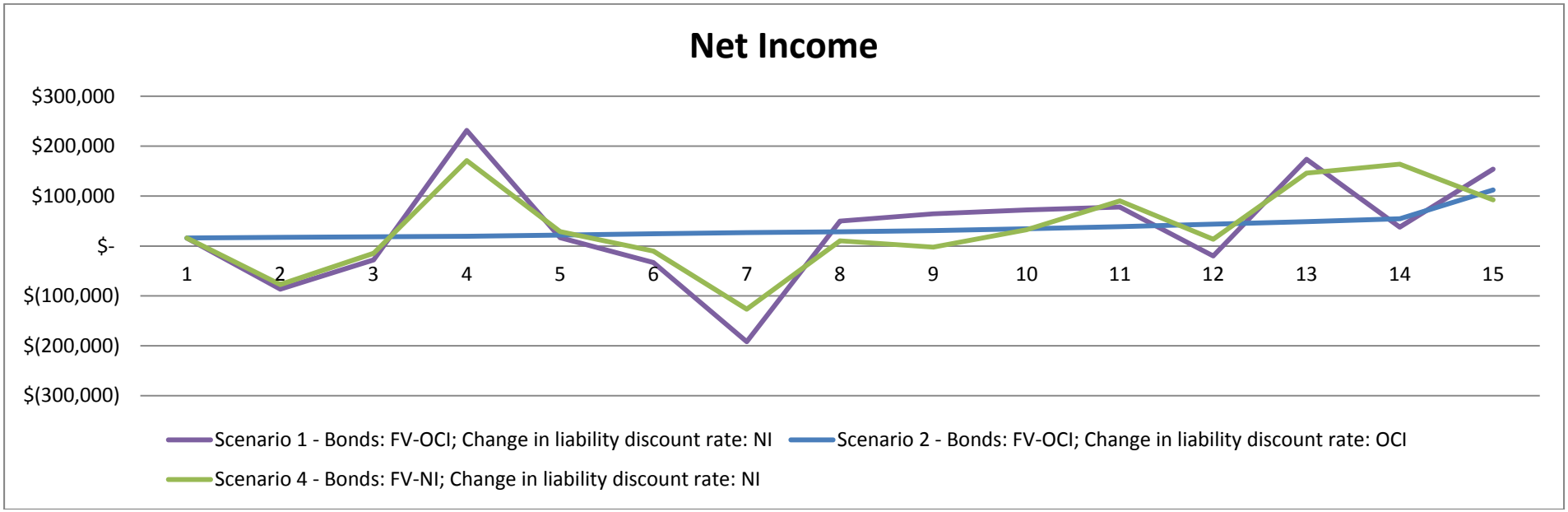
11
12
13
14
15
Effect of the Change in Discount Rate on the Liabilities
Effect of the Change in the fair value of the Bonds




A7. Based on the two examples shown above, it is clear that recording the impact of the change in the discount rate to profit or loss and the change in the fair value of the bonds to OCI would result in volatility in an insurers financial statements. In addition, the graphs indicate that there is a correlation between the changes in the value of the bonds and the changes in the discount rate. Thus recording the impact on the liability from the changes in the discount rate to OCI would eliminate or significantly reduce any accounting mismatch and would provide relevant information about an insurer's performance by presenting information in the statement of comprehensive income in a way that reflects the long-term nature of insurance and not over shadowing the results of the insurers' core operations in net income.