

Chapter 4

Estimating the Amount and Timing of Cash Flows

- 4.1 The entity-specific value or fair value of an insurance liability or insurance asset is affected by:
- (a) expectations about the cash flows from the asset or liability and about possible variations in the amount or timing of those cash flows (discussed in chapter 4);
 - (b) the price for bearing the uncertainty inherent in those cash flows (discussed in chapter 5);
 - (c) the time value of money, represented by the risk-free rate (discussed in chapter 6); and
 - (d) possibly other, sometimes unidentifiable factors, including illiquidity and market imperfections (discussed in principle 5.8).
- 4.2 As in other sections of this DSOP, the same principles apply to both life insurance and general insurance.

Expected Present Value of All Future Cash Flows

Principle 4.1

- 4.3 *The starting point for measuring insurance assets and insurance liabilities should be the expected present value of all future pre-income-tax cash flows arising from the contractual rights and contractual obligations associated with the closed book of insurance contracts. Those cash flows include estimates of future:*
- (a) *payments to policyholders¹ under existing contracts, and related claim handling expenses;*
 - (b) *premium receipts from policyholders under existing contracts, including retrospective adjustments to premiums;*
 - (c) *future policy loans to policyholders, and repayments by policyholders of principal and interest on current and future policy loans;*
 - (d) *transaction-based taxes and levies relating to existing contracts;*
 - (e) *policy administration and maintenance costs; and*

¹ In this DSOP, “payments to policyholders” include payments to other parties on behalf of policyholders.

Q:\IASB Projects\01 Active\200 New Standards and Major Projects\211 Insurance Contracts\03 Due process publications\Draft Statement of Principles\Final\DSOP5Final\Clean Files\05Chap04.DOC

(f) recoveries, such as salvage and subrogation, on unsettled claims and potential recoveries on future claims covered by existing insurance contracts.

- 4.4 Principle 4.1 refers to a starting point because principle 4.1 does not address adjustments that could be made to cash flows to reflect risk and uncertainty (see principle 5.1).
- 4.5 Sometimes, an insurer stops writing some or all types of contract and allows the existing books of insurance contracts to run off. When a book of insurance contracts goes into run-off, the cash flows from that book may change because of, for example, changes in expense levels, lapse rates, claims management procedures or tax status. Although principle 4.1 and other parts of this DSOP refer to the closed book, measurement of a closed book reflects run-off assumptions if, and only if, this is a reasonable and supportable estimate of what will occur.
- 4.6 Principle 4.1 addresses all the future cash flows that may arise from existing insurance contracts. This DSOP takes the view that the contractual rights and contractual obligations under a book of insurance contracts form components of a single net asset or liability, rather than separate assets and liabilities. Principle 13.2 addresses separate disclosure of those components.
- 4.7 The following paragraphs discuss the concept of expected present value and then discuss various aspects of principles 4.1(a) to (e). Principle 4.9 discusses recoveries.
- 4.8 In some cases, estimates, averages and computational shortcuts may provide a reliable approximation of the detailed computations required by this DSOP.

Expected Present Value

- 4.9 Accounting applications of present value have traditionally been deterministic. In other words, they discounted a single point estimate of the most likely cash flows, using a single discount rate intended to reflect the risks specific to the asset or liability. Those who support a deterministic approach argue that it:
- (a) is the most common method used today, is simple to understand, does not require statistical training and may be easier to develop than the stochastic approaches discussed in the next paragraph;
 - (b) captures uncertainties in amount and timing by simple methods that refer to observable market returns on comparable assets and liabilities; and
 - (c) leads to informative and concise disclosure because disclosure of the deterministic discount rate reveals the overall effect of assumptions about uncertainties of amount and timing and this discount rate can be compared with observable market benchmarks.
- 4.10 The expected present value is the estimated probability-weighted arithmetic average (also known as the expected value or mean) of the present values arising from each
- Q:\IASB Projects\01 Active\200 New Standards and Major Projects\211 Insurance Contracts\03 Due process publications\Draft Statement of Principles\Final\DSOP5Final\Clean Files\05Chap04.DOC
- 2 08-31-2012

scenario, without considering any adjustment for risk and uncertainty. This may differ from the single most-likely result. This DSOP requires an expected present value approach for the following reasons:

- (a) it is a stochastic approach, in other words it captures the full range of possible outcomes and the shape of their probability distribution;
- (b) it differs from the traditional approach by focusing on direct analysis of the cash flows and on more explicit statements of the assumptions used in the measurement;
- (c) unlike deterministic approaches, which must make an arbitrary assumption about timing, it can deal with uncertainties about the timing of cash flows;
- (d) a deterministic approach has no ready means of capturing correlations between cash flows and interest rates, for example where lapse rates for life insurance contracts are sensitive to interest rates. The expected present value approach captures such correlations by generating various scenarios and applying a different set of discount rates for each scenario; and
- (e) it is consistent with IAS 37, Provisions, Contingent Liabilities and Contingent Assets, which suggests an expected value approach to deal with uncertainties in amount. IAS 37 is silent on the question of uncertainties in timing.

4.11 Some accounting literature uses the term “best estimate” as a synonym for expected value. An example is IAS 37. However, some might understand “best estimate” as the most reliable estimate that an enterprise can make of items other than the expected value – for example, the mode (most-likely result) or standard deviation. It might also be understood as referring to a risk-adjusted mean. To avoid confusion, this DSOP uses the following terms:

- (a) **estimated** refers in a general sense to estimates of future events or cash flows;
- (b) **expected value** refers more specifically to one particular estimate, namely the probability-weighted average of all cash flows at a given future date, without considering any adjustment that a risk-averse investor would make for risk and uncertainty; and
- (c) **expected present value** refers to the expected value of cash flows that have already been discounted to convert them into present values.

4.12 In some cases, deterministic methods may provide a reasonable and cost-effective approximation to the expected present value. For example:

- (a) for the normal (or Gaussian) distribution, and for other symmetrical distributions of cash flows that are centred on the most likely cash flows with no uncertainty in timing, the most likely cash flows are the same as the

expected cash flows, and a single point estimate of cash flows may provide a reasonable approach; and

- (b) for short periods, low discount rates, a flat yield curve and cash flows that are not time-sensitive or interest-rate-sensitive, using the average timing may give approximately the same result as the expected present value approach.
- 4.13 In many cases, relatively simple modelling may give a reasonably reliable answer that falls within a tolerable range of precision, without the need for a large number of detailed simulations. However, in some cases, the cash flows may be driven by complex underlying factors and respond in a highly non-linear fashion to changes in economic conditions, for example if the cash flows reflect a series of inter-related implicit or explicit options. In such cases, more sophisticated stochastic modelling may be required.

Expected Present Value for Small Populations

- 4.14 Some consider that the probabilities used to determine expected present values have no real meaning for single events. They believe that probabilities can be assigned meaningfully only to a number of homogeneous events. They note that the expected value may not even be the possible outcome of an uncertain event. For example, if a cash flow has a 50% probability of being 100 and a 50% probability of being zero, the expected value of 50 is not a possible outcome. Those who take this view argue that it is unhelpful to users to report a number that is not a possible outcome.
- 4.15 For the following reasons, this DSOP requires an expected present value approach, regardless of the size of the book that constitutes the unit of account under principle 5.5, even if the book consists of a single contract:
- (a) if measurements were restricted to amounts that happen to be identical with a possible outcome, those measurements would not reflect the whole range of possible outcomes. They would not distinguish a cash flow that is certain to be 100 from a cash flow that has a 60% probability of being 100 and a 40% probability of being zero. By reflecting the whole range of possible outcomes, expected present values convey more relevant information to users;
 - (b) expected present values are additive, which is desirable given the need for financial statements to aggregate and summarise information. Also, variations in the outcomes of all an entity's cash flows will be less than the variation in the outcome of any one cash flow, especially if these cash flows are uncorrelated with each other; and
 - (c) rational market prices are based on assessments by market participants of all possible outcomes. Market prices are not constrained arbitrarily to be always equal to one possible outcome and there is no reason to impose a similar constraint on other forms of present value.

Payments to Policyholders under Existing Insurance Contracts

4.16 Payments to policyholders under existing insurance contracts include:

- (a) payments for claims under existing insurance contracts;
- (b) periodic payments during the term of existing annuities or similar insurance contracts; and
- (c) payments on maturity or termination of existing insurance contracts.

Payments for Claims under Existing Contracts

4.17 Payments for claims under existing contracts include payments for:

- (a) claims that have already been reported but not yet paid (reported claims);
- (b) claims that have already been incurred but not yet reported (IBNR);
- (c) future claims under existing contracts; and
- (d) claim handling expenses relating to reported claims, IBNR and future claims under existing contracts.

4.18 An insurer estimates future payments for claims under existing contracts on the basis of:

- (a) information about claims already reported by policyholders;
- (b) other information about the known or estimated characteristics of the book of insurance contracts;
- (c) historical data about the insurer's own experience, supplemented where necessary by historical data from other sources. Historical data is adjusted to the extent that the characteristics of the book differs (or will differ, as a result of anti-selection, as described in paragraph 1.40(g)) from that of the population used as a basis for the historical data. It is also adjusted where there is reliable evidence that historical trends will not continue, or that new trends will emerge. Principles 4.4 and 4.5 address assumptions;
- (d) the insurer's competitive situation and whether any existing competitive advantage is likely to be sustainable. This may impact items such as claims management policies and claims management procedures;
- (e) the state of the insurance price cycle for similar exposures, which will give some background information to help assess whether insurance contracts may reasonably be expected to be profitable;

- (f) known or reasonably foreseeable economic changes that may affect the insurer's cash flows; and
- (g) recent market prices for transfers of books of insurance contracts, taking account of known differences between those books and the book being measured. Such market prices may help to confirm whether an insurer's own estimates of cash flows are in line with the market consensus. Reinsurance prices may also provide useful information, if care is taken to identify factors that may cause the reinsurance price to differ from the price that would rule for a true transfer.

4.19 In current practice in many jurisdictions:

- (a) the provision for general insurance claims relates to reported claims and IBNR. Future claims under existing contracts are represented at their entry value² by a provision for unearned premiums. If this is not adequate to cover the future claims, a further provision for premium deficiency is recognised; and
- (b) life insurance liabilities are typically measured on a basis that recognises the estimated profit over the life of the contract on some basis that is intended to be systematic and rational.

4.20 Under the proposals in this DSOP, existing and future claims under existing contracts are represented at the present value of all future payments under existing insurance contracts. Principle 2.1 proposes that there should be no distinction between life and general insurance for recognition and measurement purposes.

4.21 Principle 4.1 refers to contractual rights and contractual obligations. Such rights and obligations may be:

- (a) legal rights and obligations arising from the explicit terms of the insurance contract;
- (b) legal rights and obligations arising from the explicit terms of the insurance contract in conjunction with legislative, regulatory or other legal requirements; or
- (c) constructive obligations flowing from the legal obligations in (a) or (b). Some refer to constructive obligations of this kind by such terms as "policyholders' reasonable expectations". Under IAS 37, Provisions, Contingent Liabilities and Contingent Assets, a constructive obligation arises when:
 - (i) by an established pattern of past practice, published policies or a sufficiently specific current statement, the enterprise has indicated to other parties that it will accept certain responsibilities; and

² Principle 3.1 discusses entry values and exit values, among other things.

- (ii) as a result, it has created a valid expectation on the part of those other parties that it will discharge those responsibilities.

4.22 The inclusion of constructive obligations is also consistent with the requirements on employee benefit plans in IAS 19, which states: “An enterprise should account not only for its legal obligation under the formal terms of a defined benefit plan, but also for any constructive obligation that arises from the enterprise’s informal practices. Informal practices give rise to a constructive obligation where the enterprise has no realistic alternative but to pay employee benefits. An example of a constructive obligation is where a change in the enterprise’s informal practices would cause unacceptable damage to its relationship with employees.”³.

4.23 This treatment is also consistent with paragraph 9 of the JWG Draft, which states the following.

Rights or obligations that make up financial instruments are derived from the contractual provisions that underlie them. The term “contractual” refers to an agreement between two or more parties that has clear economic consequences that the parties have little, if any, discretion to avoid, because the agreement is enforceable at law. Contractual rights and obligations, and thus financial instruments, are created by contracts that may take a variety of forms including written or oral agreements and contracts implied by an enterprise’s actions or by virtue of custom or practice.

4.24 If one party has an obligation, often another party has a corresponding right. Nevertheless, existing International Accounting Standards do not contain a notion of “constructive” assets to parallel the notion of constructive obligations. It is unlikely that actions by a policyholder would ever create a constructive obligation towards the insurer.

4.25 Some insurance contracts require payments to be made in kind. An example is where the insurer replaces a stolen article directly, instead of reimbursing the policyholder. Another example is where an insurer uses its own hospitals and medical staff to provide medical coverage. The payments for claims under such contracts are the costs of providing the goods or services in kind. Principle 4.6 (on overheads) may be particularly relevant to insurance contracts that require payments to be made in kind.

4.26 Claim handling expenses are expenses that will be incurred in the processing and resolution of claims under existing contracts, including legal and adjuster’s fees and internal costs of processing claim payments. The insurer has a present obligation to incur claim handling expenses relating to existing contracts because the insurer will be compelled to pay these expenses if the policyholder presents a valid claim.

4.27 For entity-specific value, claim handling costs will reflect the manner in which the insurer expects to settle the related claim liabilities. In other words, if the insurer expects to settle the liability itself, the claim handling costs will reflect the way in which the insurer expects to carry out the settlement. If the insurer expects to settle

³ IAS 19, paragraph 52

the liability by transferring it to another party, the insurer will pay claim handling costs indirectly through the pricing of the transfer and the expected cash outflows will reflect those claim handling costs. For fair value, claim handling costs will reflect the way in which typical market participants expect to settle the claim liabilities.

4.28 Principle 4.6 discusses the treatment of overheads in determining future cash flows.

Periodic Payments during the Term of Existing Annuities or Similar Insurance Contracts

4.29 For annuities, and other insurance contracts that give rise to periodic payments of benefits, the estimation of future benefit payments requires consideration of similar factors to those discussed for claims under existing contracts.

Payments on Maturity or Termination

4.30 Payments on maturity or termination of existing insurance contracts include:

- (a) single payments when an insurance contract matures;
- (b) payments of cash surrender value if a policyholder terminates an insurance contract before its final maturity; and
- (c) refunds of premiums covering an unexpired period of risk if a policyholder terminates an insurance contract before the end of its term.

Contracts with an Explicit Account Balance

4.31 Some life insurance contracts (for example, some contracts described as universal life, unit-linked, variable, or indexed) have variable terms and grant a measure of discretion to both the insurer and the policyholder. They use a policyholder account that functions much like an account with a bank or broker. The policyholder's premiums are credited to this account, as are investment earnings, and the account is charged for administration and mortality protection. On surrender, the policyholder is entitled to the account balance, less any surrender charges.

4.32 Under the prospective basis adopted in this DSOP, the account balance does not determine the measurement of the liability directly;⁴ instead, the measurement of the liability is based on the expected present value of cash flows arising from the contract.⁵ The future cash flows to be considered exclude future deposits by current policyholders into the account, except to the extent that the contract gives the policyholder potentially valuable options whose exercise requires those future deposits. As explained in paragraph 4.66(b)(ii), all other potential future deposits

⁴ Assuming that the contract creates sufficient insurance risk to qualify as an insurance contract under principle 1.2

⁵ Paragraphs 4.62-63 explain why this DSOP does not adopt a "deposit floor". A deposit floor would require that the insurance liability should not be measured at less than the account balance. The measurement of the liability will, of course, reflect the account balance indirectly to the extent that it affects probability-weighted estimates of surrender payments.

arise from the insurer's relationship with the policyholder, rather than from existing contractual rights and obligations.

- 4.33 Chapter 7 addresses specific issues relating to dividend and bonus payments to holders of performance-linked insurance contracts.

Future Premium Receipts under Existing Insurance Contracts

- 4.34 Future premium receipts under existing insurance contracts include future premiums through to the end of the period covered by the closed book. The expected present value of these premiums will reflect the probability of lapses by policyholders. Lapses may also affect cash outflows, by requiring the insurer to pay surrender values. Depending on the net impact on the present value of future cash flows, an unexpectedly high lapse rate may result in either income or expense for the insurer.
- 4.35 Some argue that entity-specific value and fair value should assume that policyholders will exercise lapse decisions in the way that is least favourable to the insurer. They believe that this:
- (a) reflects the insurer's obligation, which it has no power to avoid without action by the policyholder. The insurer has effectively written an option to the policyholder and a written option cannot be an asset for the insurer, nor can it reduce the insurer's obligation (see principle 4.2 for discussion of written options in relation to renewals);
 - (b) is consistent with principle 2.3, which prohibits derecognition of insurance liabilities if the insurer still has the contractual rights or the contractual obligations that resulted in the insurance liability;
 - (c) minimises subjectivity; and
 - (d) is prudent.
- 4.36 The expected present value approach leads to a different result. An insurer will estimate the probability of different lapse decisions by policyholders and then use the expected present value of the outcomes. This approach is consistent with:
- (a) existing International Accounting Standards. Under IAS 19, Employee Benefits, the measurement of employee benefits reflects the enterprise's estimate of the future employee turnover.⁶ Similarly, IAS 37 requires that provisions should be measured on a basis that reflects the enterprise's best estimate of the cost of settling the liability.⁷ This basis implicitly looks to the way in which outside parties are expected to exercise their choices, rather than assuming that they exercise their choices in a way unfavourable to the enterprise;

⁶ IAS 19, paragraph 73(a)(ii)

⁷ IAS 37, paragraph 36

- (b) the economic factors that would be considered in a market price;
- (c) the position adopted by this DSOP on renewals (see principle 4.2);
- (d) the derecognition proposals in principle 2.3. Measurement that reflects estimated lapses is not a means of derecognising a liability, it is a means of measuring the liability that still exists based on estimates of the likely cash outflows; and
- (e) the JWG's proposal that the measurement of bank deposits should reflect the estimated date of withdrawal, rather than withdrawal at the earliest contractual opportunity.⁸

4.37 It will also be necessary to consider the impact of risk and of options contained in the insurance contract (principle 5.1). In particular, it may be necessary to use option pricing methods to estimate the impact of lapse options (principle 5.6).

Retrospective Adjustments to Premiums

4.38 Some insurance contracts allow the insurer to charge an additional premium if a policyholder's claims exceed a specified amount. Some contracts provide for a refund to the policyholder if claims are less than a specified amount. Estimated future cash flows from existing contractual rights and obligations include estimates of all future retrospective adjustments to premiums arising from existing contractual rights and obligations. The adjustments are not limited to adjustments for past experience, but include estimates of future adjustments for estimated future experience. Retrospective adjustments present certain similarities to dividends under performance-linked insurance contracts, which are discussed in principle 7.1.

4.39 In extreme cases, retrospective adjustments may eliminate insurance risk for the insurer, with the result that the contract is not an insurance contract as defined in principle 1.2.

4.40 Some insurance contracts give the policyholder the option to renew a contract at a lower premium if experience has been favourable during the current contract term. Paragraph 4.64 discusses the treatment of such options.

Policy Loans

4.41 Some insurance contracts permit the policyholder to obtain a loan from the insurer. This DSOP describes such loans as **policy loans**. The future cash flows resulting from contractually required future policy loans are part of the cash flows from the insurance contract and enter into the measurement of the insurance liability or insurance asset. Those future cash flows include payments to policyholders, repayments by policyholders of principal and interest and other fees relating to the loans.

⁸ JWG Draft, paragraphs 337 and 4.29

- 4.42 Once a policyholder has drawn down a loan from the insurer, the drawn down loan has traditionally been regarded as a separate financial asset of the insurer. Therefore, future repayments of that loan have not affected the measurement of the insurance liability, as they have determined the measurement of the separately recognised financial asset. However, this DSOP takes the view that future cash flows from policy loans (both drawn and undrawn) arise from the insurance contract. Accordingly, the drawing down of policy loans is a prepayment of the insurance liability. If the amount of the policy loan exceeds the carrying amount of the related insurance liability, the excess is a separate financial asset, rather than a prepayment of the insurance liability.
- 4.43 The reporting of policy loans as a reduction in the insurance liability is not an application of offsetting under IAS 32. Offsetting occurs when an entity has both an asset and a liability and presents them on a net basis. However, the reporting of policy loans as a reduction in the insurance liability is consistent with the view that policy loans reduce the insurer's obligation.
- 4.44 Drawn policy loans may have different characteristics (for example, lapse rates and risk) than undrawn policy loans. This may have implications for estimating the amount, timing and uncertainty of the resulting cash flows. Also, the interest rate applied to policy loans may differ from the discount rate for the insurance liability. Principle 14.XXX discusses the disclosure implications of these differences.
- 4.45 The measurement of policy loans under this DSOP differs from the measurement that would apply under IAS 39 and the JWG Draft. Under this DSOP, cash flows from a book of insurance contracts are measured on a pooled basis for the entire book of insurance contracts (see principle 5.5). If there are significant correlation or diversification effects, the result of this pooled measurement may differ from the sum of the asset-by-asset measurements required under IAS 39 or the JWG Draft.

Transaction-based Taxes and Levies

- 4.46 The cash outflows arising from an insurance contract include all transaction-based taxes (such as premium taxes, value added taxes and goods and services taxes) and levies (such as fire service levies and guarantee fund assessments) that arise directly from the insurance contract, or that can be attributed to the insurance contract on a reasonable and consistent basis. The cash inflows include receipts from policyholders to pay those taxes and levies. Principle 13.5 discusses, among other things, whether revenue presented in the income statement should include premium taxes and levies.
- 4.47 Some jurisdictions levy capital taxes. These are included in the future cash flows if, and only if, they relate directly to the insurance contract, rather than to a separately recognised asset or liability, for example to financial assets held.
- 4.48 As discussed in paragraphs 4.74-75, cash flows arising from an insurance contract also include taxes that are levied on investment income without any deduction for expenses, but exclude income taxes.

Policy Administration and Maintenance Costs

- 4.49 Policy administration and maintenance costs include such items as renewal commissions for the sales force or for brokers, and administrative costs. The two main measurement issues are whether the level of costs reflects the insurer's own expected experience or the expected experience for the market as a whole (one aspect covered by principles 4.4 and 4.5) and whether such costs include overheads (discussed in principle 4.6).

Renewals

Principle 4.2

- 4.50** *In applying principle 4.1, cash flows arising from the contractual rights and obligations associated with the closed book of insurance contracts should include cash flows from future renewals to the extent, and only to the extent, that:*

- (a) their inclusion would increase the measurement of the insurer's liability; or*
- (b) policyholders hold uncancellable renewal options that are potentially valuable to them.*

- 4.51** *A renewal option is potentially valuable if, and only if, there is a reasonable possibility that it will significantly constrain the insurer's ability to reprice the contract at rates that would apply for new policyholders who have similar characteristics to the holder of the option.*

- 4.52 For many longer-term insurance contracts, if the policyholder stops paying premiums, the contract lapses or becomes paid up. To discourage lapses, the policyholder may be penalised for lapsing by a surrender charge, or by a low surrender value. In some cases, the only penalty for early surrender is that the policyholder no longer holds an option to renew the contract at contractually specified rates.

- 4.53 In effect, such contracts contain an option for the policyholder. This option may become valuable if the policyholder becomes uninsurable or if current market premiums increase. To apply principle 4.1, it is necessary to determine whether possible cash flows arising from the exercise of such options arise from existing contractual rights and obligations, rather than from separate, future contracts. This issue is the subject of principle 4.2.

- 4.54 Such contracts may be analysed as a short contract containing a policyholder renewal option, or alternatively as a long contract containing a policyholder cancellation option. For example, a one-year contract may permit the policyholder to extend the contract for up to five years without changing the premium levels or other conditions. A five-year contract with the same premium levels and other conditions may give the policyholder the right to cancel the contract without penalty after one year. These two contracts are, in substance, the same. The following discussion is written in terms of options to renew a shorter contract, but the same principles apply to options to

continue (or rather not cancel) a longer contract. In the latter case, the issue is whether measurement of the liability reflects lapses.

- 4.55 A policyholder decision to renew (or not to cancel) a contract will sometimes lead to net cash outflows, particularly if the option locks the insurer into a level of premiums that becomes uneconomic or if the policyholder would face a significant surrender charge on failing to renew. It is reasonably clear that these net cash outflows increase the insurer's liability, because the insurer has a current obligation to accept the renewal premiums and pay the resulting claims. Therefore, the measurement of the insurance liability reflects the additional net cash outflow that will arise from renewal.⁹
- 4.56 In other cases, particularly for profitable contracts, a policyholder decision to renew (or not to cancel) will lead to a net cash inflow. This would reduce the insurance liability and would, in some cases, result in the recognition of an asset. Some oppose the inclusion of this net cash inflow, on the following grounds:
- (a) the insurer has, in effect, written an option for the policyholder to continue coverage. Because an option-writer cannot control the behaviour of the option-holder, an option can never represent an asset for the writer of the option. The insurer may have a perfectly valid expectation that many policyholders may, in practice, renew the possibility (or even probability) of future premiums, but this does not reduce the insurer's present obligation under the contract;
 - (b) if the insurer does control an asset in this case, it is an intangible asset similar to a customer list or customer relationship and, arguably, not readily distinguishable from goodwill. Under most existing accounting systems, intangible assets of this kind are not regarded as recognisable. There is no persuasive argument to adopt a different treatment for insurance;
 - (c) an insurer's rights to future premiums are contingent on the policyholder's decision to renew. IAS 37, Provisions, Contingent Liabilities and Contingent Assets does not permit the recognition of contingent assets;
 - (d) the inclusion of future renewals would be inconsistent with practice in other sectors, where it would be unusual to recognise an asset (or a reduction in a liability) on the basis of a written option; and
 - (e) if some future renewals are included, it would be difficult to define where the line should be drawn. For example, in dealing with analogous cases, such as credit card borrowing options, the JWG Draft¹⁰ draws a distinction between

⁹ The following paragraphs discuss whether a written option can be an asset. If a written option cannot be an asset, measurement of those additional net cash outflows will assume that policyholders exercise lapse options in the way that results in the largest reported insurance liability. If a written option can be an asset, measurement will reflect expected lapses (with an adjustment for risk and uncertainty, as discussed in principles 5.1 and 5.6).

¹⁰ JWG Draft, paragraphs 92-94, 331-339 and 4.18-4.32.

options contained in a financial instrument (included in its fair value) and free-standing options (excluded from the fair value of a related financial instrument¹¹). Some view this distinction between free-standing and embedded options as somewhat arbitrary.

4.57 This DSOP proposes that an insurer should include cash flows from uncancellable renewal options that are potentially valuable to the current policyholder. A renewal option is potentially valuable if, and only if, there is a reasonable possibility that it will significantly constrain the insurer's ability to reprice the contract at rates that would apply for new policyholders who have similar characteristics to the holder of the option. The basis for this conclusion is as follows.

- (a) The policyholder holds a series of sequential options. The later options become progressively more valuable. However, for many insurance contracts, the policyholder must exercise earlier options to gain access to the more valuable later options. This feature – the need to exercise an earlier option in order to create a potentially valuable later option – puts a constraint on the policyholder. By creating a strong economic incentive for the policyholder to carry on paying premiums, this constraint gives the insurer contractual rights that are capable of being an asset.
- (b) People do not buy insurance to achieve a positive net present value. Indeed, they know that the present value of the expected benefits is less than the present value of the premiums, because of the insurer's expenses and profit margin. Instead, they buy insurance to acquire protection. Thus, policyholders do not have complete flexibility to stop paying premiums when the earlier options appear to be out of the money in purely financial terms.
- (c) A decision to exclude all future renewals may well lead to the reporting of significant losses at inception of many profitable long-term contracts. This may not be helpful to users.
- (d) The exclusion of future renewals may result in measurement at surrender value. Surrender value will often not reflect the value of a continuing contract from the perspective of the policyholder. Also, it would often be inconsistent with value that might be attributed to the contract in a transfer to another insurer. Furthermore, it would be inconsistent with the JWG's proposals that:
 - (i) the measurement of bank deposits should reflect the estimated date of withdrawal, rather than withdrawal at the earliest contractual opportunity;¹² and
 - (ii) the fair value of a financial asset or financial liability should include the value attributable to an embedded (rather than free-standing) option, such as the prepayment option in a prepayable loan asset.¹³

¹¹ In many cases, values so excluded would not qualify for recognition as an asset under IAS 38, Intangible Assets.

¹² JWG Draft, paragraph 337

- (e) The insurance contract gives the insurer control over a resource – the potentially valuable renewal option that gives the policyholder an incentive to renew. Although it is uncertain whether the policyholder will exercise that option, there is no uncertainty about the existence of the option. Therefore, the insurer has contractual rights that are not a contingent asset, but are capable of being an asset. IAS 37 defines a contingent asset “as a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the enterprise.” In other words, a contingent asset arises where it is not certain whether the enterprise controls a resource. A contingent asset does not exist when it is certain that the enterprise controls a resource, but it is not certain whether that resource will generate economic benefits.

4.58 The Issues Paper proposed that the closed book should include those renewals where existing contracts commit the insurer to a specified pricing structure for the renewals. As respondents found this proposal unclear, this DSOP focuses instead on whether policyholders hold uncancellable renewal options that are potentially valuable. The following examples illustrate this proposal.

Examples of renewal cash flows included in the closed book

Although example 1 does not include future renewals, it is included here for completeness because it illustrates one end of the spectrum where neither party can cancel the contract during its term. In each of example 2 to 6, the contract gives the policyholder potentially valuable options. As a result, future cash flows from future renewals are included in the closed book.

1. The contract is for a fixed term and the pricing formula is at least partly fixed throughout the term. Neither the insurer nor the policyholder can cancel the policy during its term. The policyholder can compel the insurer to continue accepting premiums and pay valid claims, and the insurer can compel the policyholder to continue paying premiums.
2. The contract is for a fixed term and the pricing formula is at least partly fixed throughout the term. The insurer cannot cancel the policy during its term. The policyholder can compel the insurer to continue accepting premiums and pay valid claims. This gives the policyholder a potentially valuable option. The policyholder can cease paying premiums, in which case the policy lapses. The insurer cannot, in practice, compel the policyholder to continue paying premiums. Policyholders have an economic incentive to continue paying premiums because this keeps alive their option to renew if the fixed element of pricing formula is favourable.

¹³ JWG Draft, paragraph 4.28

3. The contract is for a fixed term. The insurer cannot cancel the policy during its term. The premiums for each year are based on current market premiums, but renewal premiums are capped. This cap creates a potentially valuable option for policyholders to renew the contract even if they have become uninsurable (for example, for a life insurance contract, policyholders with significantly reduced life expectancy may no longer be insurable). The policyholder can compel the insurer to continue accepting premiums and pay valid claims. The policyholder can cease paying premiums, in which case the policy lapses. The insurer cannot, in practice, compel the policyholder to continue paying premiums. Policyholders have an economic incentive to continue paying premiums because this keeps alive their option to renew if the cap is likely to come into the money.
4. The contract is for a fixed term. The insurer cannot cancel the policy during its term. The premiums for each year are based on current market premiums. The policyholder can compel the insurer to continue accepting premiums and pay valid claims. The policyholder can cease paying premiums, in which case the policy lapses. The insurer cannot, in practice, compel the policyholder to continue paying premiums. The contract includes an investment component and a significant penalty for early surrender gives policyholders a potentially valuable option to continue paying premiums.
5. The contract is for a fixed term and covers hurricane damage in Florida. The insurer cannot cancel the policy during its term. The insurer and its competitors no longer sell similar contracts in Florida. The premiums for each year are based on current market premiums, but renewal premiums are capped. The policyholder can compel the insurer to continue accepting premiums and pay valid claims. The policyholder can cease paying premiums, in which case the policy lapses. The insurer cannot, in practice, compel the policyholder to continue paying premiums. Policyholders have an economic incentive to continue paying premiums because similar cover is no longer available in the market. The cap prevents the insurer from resetting premiums at a level that would negate the benefit of the option.
6. The contract is a group contract providing medical cover for all of an entity's employees who choose to take out cover. The insurer cannot cancel the contract for two years. Pricing under the contract is guaranteed for one year. After one year, the insurer can set a new price (subject, of course to market pressures). Contractually, employees or the entity can cancel the policy at any time without penalty (other than the loss of continued coverage).

Two parties hold potentially valuable options in this example: the entity and the individual employees. Because cover under the contract costs substantially less than employees can obtain under individual contracts, new employees have an economic incentive to exercise their option to take out cover under the contract. Similarly, all employees who are covered under the contract have an economic incentive to remain members. Therefore, future cash flows from the closed book include all cash flows arising from current and projected new

employees for the one year for which the insurer has given a price guarantee. Cash flows beyond the end of that period relate to future insurance contracts, not to the existing closed book.

- 4.59 The following are examples of cases where the closed book does not include cash flows from future renewals, because the contract does not give the policyholder a potentially valuable option to renew the contract.

Examples of renewal cash flows excluded from the closed book

1. The contract is renewable annually¹⁴. The policy is renewed automatically each year at current premium rates for a further year unless the policyholder or insurer gives three months' notice of cancellation. (Note: after the deadline has passed for notice of cancellation, the closed book includes cash flows relating to the following year)
2. The contract is annual. The insurer sends the policyholder a renewal notice annually. In practice, a new contract starts at current premium rates, unless the policyholder informs the insurer that renewal will not take place. Legally, renewal is not automatic, but in practice, the contract is administered in a way that makes renewal virtually automatic.
3. The contract is annual. The policyholder is required to sign a pre-printed proposal form containing all the relevant contract details, as recorded in the insurer's database, and to confirm any changes in circumstances. If the policyholder does not sign and return the proposal form, no new contract starts.
4. The contract is annual. The regulator requires the insurer to continue writing certain types of business as a pre-condition for being authorised to write any class of insurance in that jurisdiction.
5. The contract is annual. Because of concerns for its reputation, the insurer feels obliged to continue writing certain classes of business.
6. The contract is annual. There are no legal, commercial or other considerations that compel the insurer to continue writing insurance and there is no constraint on the insurer's ability to reprice new contracts. However, no other insurers are active in a certain class of business. As a result, policyholders feel compelled to continue renewing policies with the insurer.
7. The contract is annual. There are no legal, commercial or other considerations that compel either the insurer or the policyholder to renew contracts. Past experience shows that the level of renewals is highly predictable.

¹⁴ An annual renewal period has been chosen solely for illustration. The length of the renewal period has no significance.

8. The contract is for a fixed term of ten years and the pricing formula is fixed for the first three years. The insurer cannot cancel the policy during its term. The policyholders can compel the insurer to continue accepting premiums and pay valid claims. This gives the policyholders a potentially valuable option. The policyholders can cease paying premiums, in which case the policy lapses. The insurer cannot, in practice, compel the policyholders to continue paying premiums.

The policyholders have an economic incentive to continue paying premiums for the first three years because this keeps alive their option to renew if the fixed element of pricing formula is favourable. However, the renewal option is not potentially valuable to the policyholders beyond three years because the insurer is free to reset the premiums. Even if the policyholders' insurability has undergone a significant decline, the insurer's unrestricted freedom to reset premium rates means that the policyholders' option is not potentially valuable.

- 4.60 As explained in paragraph 4.54, renewal options may be structured as either options to renew a shorter contract or as options to cancel a longer contract. The above examples relate to all renewal options, regardless of their legal form.
- 4.61 The cash flows from future renewals to be included are all those determined in accordance with principle 4.1, including future cash inflows such as the premiums for the renewals (net of expected lapses) and future cash outflows such as payments to policyholders for claims.

Deposit Floor

- 4.62 The Issues Paper proposed in the “non-fair-value” version of the asset and liability measurement model that insurance liabilities should be measured prospectively, but at no less than a minimum amount (sometimes described as a “deposit floor”), which is the result of applying a retrospective approach. The deposit floor:
- (a) is the account balance that accrues to the benefit of policyholders, after deducting any surrender charges that would apply if the contracts were terminated. If the contract has no account balance, the deposit floor is the cash surrender value or other amount repayable to the policyholder on termination; and
 - (b) cannot be less than zero (unless the insurer has the enforceable ability to recover additional amounts from policyholders who terminate their contracts). In other words, using the deposit floor, the insurer can never recognise an insurance asset.
- 4.63 The imposition of a deposit floor is largely equivalent to the exclusion of some or all renewals. Accordingly, the above discussion of renewals replaces the Issues Paper's discussion of the “deposit floor”.

No-claims Discount

4.64 Some insurance contracts give the policyholder the right to renew a contract at a lower premium if experience has been favourable during the current contract term.

- (a) Under principle 4.2, if the policyholder's renewal option is potentially valuable, future cash flows under existing contracts include all cash flows arising until the end of the period affected by the valuable renewal option.
- (b) If the policyholder's renewal option is not potentially valuable, future cash flows from existing contracts do not include any cash flows arising from future renewals. Some argue that the renewal rate includes an implicit payment from the insurer to reflect previous experience. They view this as similar to the retrospective premium adjustments discussed in paragraphs 4.38-40. However, this DSOP takes the view that all these cash flows should be considered as arising from a future contract rather than from the existing contract.

Examples

1. Insurer A offers the following no claims discount for household insurance. If the policyholder has made no claims during the previous contract year, the premium for the following year is reduced to 80% of the normal level. If the policyholder has made no claims during the previous two consecutive contract years, the premium for the following year is reduced to 60% of the normal level. Under the contract and local legislation, the insurer must give notice of twelve months if it does not wish to renew an insurance contract. If the policyholder changes insurer, a new insurer will not grant a non-claims discount for the policyholder's experience with the old insurer.

The policyholder holds an uncancellable option to renew the contract for twelve months if the insurer has not yet given notice that it does not wish to renew. For a policyholder who has not had a recent claim, the option is potentially valuable because of the no claims bonus. The policyholder does not hold an option to renew the contract after that date because the insurer holds an option to prevent further renewals. Therefore, estimated future cash flows from the existing book of insurance contracts include estimated cash flows for renewals ending up to twelve months after the next renewal date.

2. Insurer B offers the following no claims discount for car insurance. If the policyholder has made no claims during the previous contract year, the premium for the following year is reduced to 80% of the normal level. If the policyholder has made no claims during the previous two consecutive contract years, the premium for the following year is reduced to 60% of the normal level. Under the contract and local legislation, the insurer must give notice of twelve months if it does not wish to renew an insurance contract. If the policyholder changes insurer, a new insurer will grant a non-claims discount equivalent to the policyholder's experience with the old insurer.

Although the policyholder holds a no claims bonus, the policyholder is not required to stay with the existing insurer in order to realise the value of the option. Accordingly, the options are not potentially valuable and do not give the policyholder an economic incentive to renew the insurance contract. Therefore, estimated future cash flows from the existing book of insurance contracts exclude estimated cash flows for renewals.

Observable Market Prices That Include Renewals

4.65 The observed price at which a book of insurance contracts is exchanged in the market can be regarded as comprising two components:

- (a) a price for the rights and obligations under the existing contracts that form the closed book; and
- (b) the price for the entitlement to retain the net benefit from those future renewals that are not in the closed book, cross-selling opportunities, and the value of customer lists. This latter element is essentially an intangible element similar in nature to a customer relationship and would probably not qualify for recognition as an asset under IAS 38, Intangible Assets.

4.66 Two approaches are possible in such cases:

- (a) use the observed market prices, even if the observed market price includes extra-contractual elements that would not, if considered individually, qualify for recognition as an asset or liability; and
- (b) exclude the amount, if it can be determined reliably, that relates to such extra-contractual elements. The JWG Draft adopts this second approach. The JWG Draft¹⁵ gives the following examples of values included in market exit prices that should be excluded from the fair value of financial instruments:
 - (i) expected cash flows from expected renewals or extensions of an existing financial instrument that the enterprise does not have a contractual right or obligation to renew or extend;
 - (ii) expected cash flows from future transactions with the customer that do not result directly from the financial instrument contract but are expected to occur because of a relationship established by the existence of the financial instrument; and
 - (iii) any net cash flow benefits expected by the writer of free-standing options to result from holders' future decisions to exercise or not exercise the options. (However, the fair value of an embedded written option, such as a prepayment option in a prepayable loan asset, would

¹⁵ JWG Draft, paragraphs 94, 331-339 and 4.18-4.32.

reflect market expectations of the holder's future decisions to exercise or not exercise that option.)

4.67 Supporters of the first approach reason that it:

- (a) is helpful to users to base financial reporting on observed market prices, even if the observed market price includes extra-contractual elements that would not, if considered individually, qualify for recognition as an asset or liability; and
- (b) would be difficult to quantify reliably any such amount that should be excluded.

4.68 This DSOP adopts the second approach. The entity-specific value or fair value of an insurance liability or insurance asset incorporates only those cash flows that result directly from the contractual rights and obligations created by the closed book of existing insurance contracts (including those renewals identified in principle 4.2). In particular, it does not include the value of extra-contractual intangible items, such as customer relationships. It is beyond the scope of this DSOP to consider the accounting treatment for such items. Under IAS 38, Intangible Assets, it is unlikely that such items would qualify for recognition as assets.

4.69 In some cases, although the policyholder has no right to require renewal of the contract, a high (and sometimes predictable) percentage of contracts are renewed more or less automatically. In the view of some, a failure to renew such a contract is, in substance similar to a lapse of a multi-year contract. However, this DSOP takes the view that no recognisable asset exists in this case.

Renewal and Cancellation Options Held by the Insurer

4.70 Some insurance contracts contain an option for the insurer to renew the existing contract, or to cancel the existing contract before maturity. If the insurer has the ability to exercise the options in practice, that option can be an asset controlled by the insurer (or a reduction in its liability). However, as the insurer cannot be required to exercise that option, the option does not constitute a liability for the insurer. Therefore, such an option may decrease the measurement of an insurance liability, but can never increase it.

4.71 In assessing whether it has the ability to exercise options in practice, the insurer considers the impact of any legislative, regulatory, contractual, or other legal obligations placed on it and of any constructive obligations that it has undertaken, as well as the costs that would be incurred in seeking to exercise the options. It is likely that insurers will rarely have the ability to exercise such options in practice. Furthermore, if an insurance contract was originally priced to be profitable, cancellation options held by an insurer are likely to be well out of the money at inception. In most cases, it seems likely that such cancellation options will have little impact on measurement unless there is a significant risk that they will come into the money.

Cash Flows Excluded

Principle 4.3

4.72 *The following future cash flows should not be included in determining the expected present value of future pre-tax cash flows arising from the closed book of insurance contracts:*

- (a) income tax payments and receipts;*
- (b) cash flows arising from future insurance contracts;*
- (c) payments to and from reinsurers;*
- (d) investment returns from current or future investments (except for certain performance-linked contracts, see chapter 7); and*
- (e) cash flows between different components of the reporting entity.*

Income Taxes

4.73 Under IAS 12, Income Taxes, an enterprise accounts for income taxes separately from other assets and liabilities. To avoid double counting, this DSOP proposes that insurance liabilities and insurance assets should be measured by discounting pre-tax cash flows at a pre-tax discount rate.

4.74 IAS 12 defines income taxes as taxes that are based on taxable profits. Taxable profit is defined as the profit for the period, determined in accordance with rules established by the taxation authorities, on which income taxes are payable. Some argue that this somewhat circular definition of income taxes includes taxes that are levied on investment income without any deduction for expenses. Because the overall impact of these taxes is similar to taxes levied on investment income after expenses, supporters of this view consider that it is justifiable to treat them in the same way.

4.75 For the following reasons, this DSOP takes the view that such taxes should be treated as transaction-based taxes included in the future cash flows under principle 4.1(c), not as income taxes:

- (a) such taxes are generally regarded by the tax authorities and the local financial community as a tax deducted by the insurer from policyholders' returns and collected on behalf of the tax authorities, rather than as a means of taxing the insurer; and*
- (b) if such taxes are treated as income taxes, IAS 12 does not currently permit them to be discounted. In the Steering Committee's view, this would lead to a misleading result. Principle 10.2 discusses whether IAS 12 should be amended to permit discounting of deferred taxes arising from insurance contracts.*

Future Insurance Contracts

- 4.76 Cash flows from possible future insurance contracts (including cash flows from possible future renewals that do not form part of the closed book under principle 4.2) do not affect the measurement of insurance liabilities and insurance assets.
- 4.77 Principle 4.10 deals with one specific category of cash flows that do not form part of the closed book – cash flows relating to provisions for catastrophes or equalisation.

Reinsurance

- 4.78 Under principle 8.3, an insurer should recognise an insurance asset arising under reinsurance contracts as an asset, rather than as a deduction in measuring the related direct insurance liability. It follows that the estimated future cash flows used to measure an insurance liability exclude estimated cash outflows for reinsurance premiums and estimated cash inflows from reinsurance recoveries.

Investment Returns

- 4.79 Some argue that market participants consider the estimated returns from investing the proceeds of a liability in deciding whether to accept a proposed transaction price for that liability.
- 4.80 However, as discussed in principle 3.2, this DSOP argues that it is not appropriate to consider future cash flows from investments in measuring non-performance-linked contracts. This is consistent with the JWG Draft. Under the JWG's approach to estimating fair values that cannot be observed directly in the market, the fair value of a financial liability reflects the cash flows from the liability and the return observed in the market for similar financial liabilities; the estimated fair value of the financial liability does not reflect the return on, or market price of, the assets in which the borrower invests the proceeds from issuing the financial liability.
- 4.81 Although the entity-specific value or fair value of an insurance liability or insurance asset does not reflect future cash flows from investments, it does reflect future cash inflows from explicit investment management charges that will be levied on policyholders under the insurance contract (as well cash outflows incurred by the insurer in order to generate those investment charges). It should be noted that this treatment differs from the treatment that most managers of mutual funds adopt. Mutual fund managers generally recognise management fee income on a time proportion basis consistent with IAS 18, Revenue. This DSOP takes the view that it is not feasible or appropriate to attempt to exclude future investment management charges from the cash flows used to determine entity-specific value or fair value. These charges are one form of cash flow arising from the insurance contract and there is no reason to treat them differently from other cash flows.
- 4.82 Some insurance contracts credit interest to policyholders based on an explicit account balance. In some cases, the rate credited is below rates that would be paid on bank deposits of comparable amount. In effect, the difference between these rates is an implicit charge levied by the insurer. The entity-specific value or fair value of the

insurance contract will reflect estimated future payments to the policyholder. In effect, therefore, the entity-specific value or fair value reflects the implicit charge because the future cash flows are determined after implicitly deducting the charge.

- 4.83 Investment management fees are determined in a variety of ways. For example, some fees are calculated as a percentage of funds under management. Some other fees are a percentage of the amount by which investment performance exceeds some benchmark. This DSOP reflects the view that these differences in fee structures do not have accounting implications.

Regulatory Requirements

- 4.84 In many countries, insurance supervisors require an insurer to hold a certain level of capital. Some argue that the cash flows used to measure insurance liabilities should include the future cash flows from the assets acquired with the capital required by the supervisor, discounted using the insurer's cost of capital. They argue that:
- (a) because capital is scarce, a requirement to hold capital imposes real costs on an insurer. For example, sometimes tax considerations make it more expensive for an insurer to hold extra capital, than for the insurer's owners to hold additional investments directly. Also, if an insurer's managers have extra capital available, they may invest it inefficiently in ways that do not increase shareholder value, for example in unprofitable acquisitions;
 - (b) the experience of those involved in purchases and sales, both of assets or liabilities and of businesses, is that buyers and sellers regularly consider the cost of regulatory capital requirements in negotiating transaction prices. Although this evidence is anecdotal, and not necessarily easy to demonstrate with empirical research, market professionals believe that regulatory capital requirements have a cost that affects fair value and should affect entity-specific value; and
 - (c) in the view of some, cost of capital computations are one way of trying to determine the price that the market requires for bearing risk and uncertainty (see principle 5.1 for further discussion).
- 4.85 Some believe that cost of capital is one way of recognising the effects of an insurer's own credit standing. They note that:
- (a) cost of capital depends on risk and on the degree of leverage (gearing) and both of these factors are correlated with an insurer's credit standing; and
 - (b) cost of capital approaches rely on the fact that shareholders are not liable for losses beyond the amount of their investment. However, limited liability is relevant to a measurement issue only if the measurement assumes some probability that the insurer will default. Thus, any measurement that relies on limited liability implicitly refers to own credit standing.

- 4.86 Some believe that the method discussed in the previous paragraph (using the insurer's cost of capital to discount estimated future cash flows from the assets acquired with the required capital) overstates the cost of a regulatory capital requirement. They believe that such a requirement does not generally have a significant effect on the entity-specific value or fair value of insurance liabilities or insurance assets, unless the capital requirements compel the insurer to invest in assets that do not earn a market rate of return.
- 4.87 In some cases, regulators require insurers to invest in assets that do not earn a market return. For example, some countries require insurers to hold government bonds that do not pay a normal market return. Such a requirement reduces the economic benefits that an insurer derives from holding such assets. Example 4.1 illustrates various approaches to such requirements.

Example 4.1 – Regulatory Investment Requirement

A regulator requires regulated insurers to hold 15% of the total carrying amount of total insurance liabilities in non-interest bearing deposits with the central bank that can be withdrawn at face amount at any time (subject to the capital requirement). Insurer A has insurance liabilities with a total carrying amount of 1,000,000, before considering the cost of capital. Therefore, the insurer is required to hold deposits of 150,000.¹⁶ The insurance liabilities have a weighted average duration of 5 years. Insurer A's cost of capital is 18% and the risk free rate for 5 years is 10%.

Some would argue that the insurer should apply the cost of capital to determine the cost of the regulatory requirement. As the non-interest bearing assets will be released, on average, in five years, it is assumed, for simplicity that the cost of the requirement is 84,434 (150,000 less the present value at 18% of 150,000 in five years, being 65,566).

Others would argue that the cost of the regulatory requirement should be determined using the return that the market would otherwise require on assets that generate cash flows of the same amount, timing and risk profile.¹⁷ On this basis, the cost of the regulatory requirement is 56,682 (150,000 less the present value at 10% of 150,000 in five years, being 93,139).

Some would argue that the cost of the regulatory capital requirement is 150,000, as the insurer will be required to maintain central bank deposits of 150,000 as long as its regulated operations continue at the same level.

¹⁶ In practice, many countries would impose solvency and capital adequacy requirements. Example 4.1 does not consider such requirements, as they are not relevant to the point being illustrated here.

¹⁷ In this case, the market would require a return equal to the risk-free rate for five-year instruments. If the regulator permitted or required investment in different assets of a different duration, the required return would be one consistent with the characteristics of the cash flows to be generated by those assets.

4.88 Possible treatments that might be considered for the cost of the regulatory requirement identified in example 4.1 are:

- (a) add it to the carrying amount of the regulated insurance liabilities. Supporters of this treatment argue that the regulatory requirement is one of the terms and conditions that governs the regulated insurance liability and should be reflected in its measurement. They consider that the regulatory requirement, in substance, imposes a transaction-based transaction tax and that the resulting cash flows should be reflected in the measurement of the insurance liability, consistent with principle 4.1(d). They also observe that the insurer is still free to withdraw the central bank deposit at any time, although it will be required to reinvest if it wishes to maintain its regulated operations at the same level. Some would adopt this treatment when, and only when, the regulatory requirement can be related objectively to specific regulated liabilities (for example, a requirement based on transaction volumes or on the carrying amount of those regulated liabilities);
- (b) deduct it from the carrying amount of the assets in which the required capital is invested (in example 4.1, the central bank deposit). They argue that the regulatory requirement imposes an additional restriction on these assets and converts them from cash into illiquid instruments (in example 4.1, maturing in five years); or
- (c) recognise it as a separate liability. Supporters of this treatment argue that the regulatory requirement does not change the features of the regulated liabilities or of the central bank deposit and so should not affect their measurement. However, they suggest that it does have a real economic cost for the insurer as a result of past transactions and should, therefore, be recognised in the financial statements as a separate liability.

4.89 Under principle 3.2, the measurement of insurance liabilities is independent of the insurer's assets. Therefore, the cost of the regulatory requirement should not affect the measurement of the insurance liability. It is beyond the scope of this DSOP to determine the measurement of the assets held to satisfy the regulatory requirement. However, the following comments are relevant.

- (a) When a regulator requires an insurer to invest in assets that earn less than a market return, in principle the carrying amount of the assets should be reduced to reflect the estimated cash flows from the assets, discounted at a market return. This would be consistent with the principles underlying IAS 36, Impairment of Assets. The effect on the insurer's reported net profit or loss and equity would be consistent with the effect of transaction-based taxes under principle 4.1(d) and with the view that the opportunity cost imposed by the requirement is a form of transaction-based tax. However, financial assets are excluded from the scope of IAS 36. Under IAS 39, Financial Instruments: Recognition and Measurement, financial assets that are measured at amortised cost would be regarded as impaired only if it were no longer probable that the

holder will not be able to collect all principal and interest due under the contract.

- (c) When a regulator imposes minimum capital requirements, but permits an insurer to invest in assets that earn a market return, the regulatory requirement does not change the features of the regulated liabilities or of the central bank deposit and so should not affect their measurement. The insurer has incurred no additional obligation as a result of past events. Therefore, the Framework's definition of a liability is not satisfied. The cost of the regulatory requirement is simply one of the many favourable and unfavourable factors that are reflected in unrecognised internally generated goodwill. Its effects will be recognised in net profit or loss over time as the insurer earns a return below market requirements. Principle 4.3(d) prohibits the inclusion of investment returns from current or future investments in the cash flows used to measure an insurance liability, even if those investments are held to meet a regulatory capital requirement. Principle 14.XXX considers whether such regulatory requirements have any disclosure implications.

Cash Flows between Different Components of the Reporting Entity

- 4.90 Some jurisdictions require insurers to place premiums received into a separate fund, which as a priority must be used to pay claims and is not available to general creditors or shareholders unless certain solvency or capital adequacy tests are met. Under principle 11.1, the insurer and any of its separate funds form a single reporting entity which should prepare a single set of financial statements. It follows that the measurement of insurance liabilities and insurance assets does not reflect cash payments (injection or withdrawal of capital or distributions of retained earnings) between separate funds and the rest of the reporting entity.

Assumptions

Principle 4.4

- 4.91** *In determining entity-specific value, each cash flow scenario used to determine expected present value should be based on reasonable, supportable and explicit assumptions that:*

- (a) *reflect:*
- (i) *all future events, including changes in legislation and future technological change, that may affect future cash flows from the closed book of existing insurance contracts in that scenario;*
 - (ii) *inflation by estimating discount rates and cash flows either both in real terms (excluding general inflation, but including specific inflation) or both in nominal terms; and*
 - (iii) *all entity-specific future cash flows that would arise in that scenario for the current insurer, even cash flows that would not arise for other*

market participants if they took over the current insurer's rights and obligations under the insurance contract;

- (b) in relation to market assumptions, are consistent with current market prices and other market-derived data, unless there is reliable and well-documented evidence that current market experience and trends will not continue. Such evidence is likely to exist only if a single, objectively identifiable, event causes severe and short-lived disruption to market prices. In such exceptional cases, the assumptions should be based on this reliable evidence; and*
- (c) in relation to non-market assumptions, are consistent with the market assumptions discussed in (b) and with the most recent financial budgets/forecasts that have been approved by management. To the extent that those budgets and forecasts are not current and not intended as neutral estimates of future events, the insurer should adjust those assumptions. If the budgets and forecasts are deterministic, rather than stochastic, the entire package of scenarios should be consistent with the budgets and forecasts.*

Principle 4.5

4.92 *When fair value is not observable directly in the market, fair value should be estimated by using principle 4.4, but with the following two differences.*

- (a) Fair value should not reflect entity-specific future cash flows that would not arise for other market participants if they took over the current insurer's rights and obligations under the insurance contract (see paragraphs 4.113-4.120).*
- (b) If there is contrary data indicating that market participants would not use the same assumptions as the insurer, fair value should reflect that market information (see paragraphs 4.121-4.131).*

Background

4.93 Paragraph 77 of the JWG Draft sets out a hierarchy of possible sources of fair value for financial instruments. In principle, a similar hierarchy could apply for insurance contracts. This DSOP does not include such a hierarchy, because it would be largely redundant given that few insurance contracts are traded in public markets.

4.94 Because the fair value of most insurance contracts is not directly observable in the market, their fair value would need to be estimated using valuation techniques that:

- (a) reasonably mimic how the market could be expected to price a book of insurance contracts; and
- (b) use inputs that reasonably represent market expectations and measures of the risk-return features inherent in the book of insurance contracts. Those inputs may be divided into two categories:

- (i) **market assumptions** about inputs such as interest rates that are readily estimated from transaction prices observable in the capital markets; and
- (ii) **non-market assumptions** about inputs, such as claim rates, claim severity, lapse rates and mortality, that are not readily estimated from the capital markets.

4.95 Various kinds of market exist and may provide market information that can be used in estimating entity-specific value or fair value.

- (a) Primary markets for the issuance of direct insurance contracts to policyholders may give some information about the current pricing of risk in direct insurance. However, it should be remembered that these prices do not reflect the value that the direct insurer would add by collecting insurance risk in primary (often retail) markets, assembling it into portfolios and transferring it to secondary (generally wholesale) markets. Under the exit value proposals in principle 3.1, the measurement of insurance liabilities reflects the price that would be paid in the secondary markets for the cash flows arising from contractual assets and obligations, even if the insurer has no intention (or even ability) to transfer those cash flows in secondary markets.
- (b) Conceptually, secondary markets for the transfers of books of insurance contracts from one insurer to another insurer provide the ideal information for fair value and also for the market-related components of entity-specific value. However, such markets are generally extremely thin and the prices are often not publicly available. Also, the prices sometimes include an implicit (and perhaps not easily quantifiable) amount attributable to future benefits from the relationship with policyholder (as discussed in paragraphs 4.65-69).
- (c) Reinsurance markets may provide some indication of prices that would prevail in secondary markets. However, they are not generally true exit prices because reinsurance transactions do not typically satisfy this DSOP's derecognition criteria (see principle 2.3). Also, reinsurance often covers only some portion of the cedant's liability under the direct insurance contract. This may make it difficult to use the reinsurance premium as a basis for measuring the entire liability. In addition, the price may reflect the benefits of customer relationships and the fact that the claims management objectives and procedures of the reinsurer are likely to differ from those of the direct insurer.
- (d) Prices may be available in markets for traded instruments, such as catastrophe bonds and weather derivatives. However, these prices would need to be used with caution, as the event covered is unlikely to correspond exactly to the insured event specified in the insurance contract. Furthermore, markets in such instruments may be thin.

- (e) The capital markets will provide information that forms the basis for the market assumptions discussed in paragraph 4.124.

Explicit Approach to Assumptions

- 4.96 Some favour an implicit approach to assumptions. In an implicit approach, assumptions are selected in combination with the aim of developing a meaningful measurement overall. For example, an implicit approach might express assumptions in terms of relationships between different variables, such as inflation and interest rates. However, assumptions about individual variables may not be meaningful in isolation. Others favour an explicit approach, in which each significant assumption is meaningful in its own right.
- 4.97 One example of an implicit approach to assumptions is a net premium measurement method, based on future premiums after deductions for assumed levels of expenses. The corresponding explicit approach is found in gross premium methods, that are based on total premium inflows with separate, explicit deductions for estimated future expenses.
- 4.98 Some question whether the costs and complexities of an explicit approach to making assumptions are justified. Some observe that the estimates involved in measuring insurance obligations are especially difficult and subjective, and suggest that an implicit approach to some assumptions might be acceptable.
- 4.99 This DSOP requires an explicit approach to assumptions. This is consistent with IASB standards on provisions (IAS 37) and employee benefits (IAS 19), provides greater transparency, and produces estimates that are more understandable. An explicit approach does not preclude stochastic modelling and similar techniques.
- 4.100 Different assumptions may have joint effects. An example is where lapse rates are correlated with interest rates. Similarly, claim levels for house or car insurance may be correlated with economic cycles and hence with interest rates and expense levels. An explicit approach does not preclude, and in fact requires, consideration of such joint effects. The expected present value approach is well suited to capturing joint effects.

Future events

- 4.101 Some argue that estimates of future cash flows should exclude certain specified categories of future event, such as one or more of the following:
- (a) changes in legislation, including changes in tax rates and tax law;
 - (b) technological change (which might be divided into refinements of existing technology and development of completely new technology); and
 - (c) regulatory approval, for example of a new drug that may affect the cost of providing medical benefits.

4.102 The arguments for excluding some or all of these categories of cash flows are that:

- (a) these cash flows arise from future events that will create new rights or obligations that do not yet qualify for separate recognition as assets or liabilities, rather than to a measurement of an asset or liability that already exists;
- (b) the effects of these events cannot be measured reliably. To ensure relevant and reliable information for users of financial statements, measurement should reflect only those future events that pass some specified level of predictability – for example, future events that are “probable” or that are at least “more likely than not” or that are supported by reliable evidence; and
- (c) some IASB standards already exclude the effect of some future events. For example:
 - (i) under IAS 37, Provisions, Contingent Liabilities and Contingent Assets, future events that may affect the amount required to settle an obligation should be reflected in the amount of a provision only where there is sufficient objective evidence that they will occur.¹⁸ Thus, possible new legislation is taken into consideration in measuring an existing obligation only when sufficient objective evidence exists that the legislation is virtually certain to be enacted.¹⁹ Similarly, it is not appropriate to anticipate the development of a completely new technology unless it is supported by sufficient objective evidence;²⁰
 - (ii) under IAS 12, Income Taxes, the tax rates and tax laws used to measure deferred tax liabilities and deferred tax assets are the rates that are enacted or substantively enacted by the balance sheet date;²¹ and
 - (ii) under IAS 19, Employee Benefits, assumptions about future benefits should reflect the formal terms of the plan (or the constructive obligation if it goes beyond the formal terms), and should not reflect possible future benefit increases that do not meet these requirements.²²

4.103 This DSOP proposes that assumptions should reflect all future events that may affect the amount and timing of future cash flows under an insurance contract. Another party assuming the insurer’s rights and obligations under the contract would consider the possibility of those future events in determining an acceptable price for those existing rights and obligations. It follows that the possibility of those future events affects the measurement of the existing asset or liability, rather than creating a separate asset or liability.

¹⁸ IAS 37, paragraph 48

¹⁹ IAS 37, paragraph 50. Similarly, where details of a proposed new law have yet to be finalised, an obligation arises only when the legislation is virtually certain to be enacted as drafted (IAS 37, paragraph 22).

²⁰ IAS 37, paragraph 49

²¹ IAS 12, paragraphs 46 and 47

²² IAS 19, paragraph 83(b)

- 4.104 Thus, an expected present value computation includes cash flow scenarios with and without the future events and the cash flows from each scenario are weighted by the estimated probability that the scenario will occur. Principle 5.1 addresses the impact of risk and uncertainty.
- 4.105 As discussed above, the proposed treatment of future events is inconsistent with the treatment of future changes in tax law (under IAS 12) and other changes in legislation (Under IAS 37). The Steering Committee acknowledges this inconsistency, but believes that its proposal is more consistent with market-based valuation.
- 4.106 Some believe that the proposed treatment of future events is inconsistent with the treatment of a law suit under IAS 37. Under IAS 37, an enterprise does not recognise a present obligation under a law suit unless it is more likely than not that a present obligation exists at the balance sheet date.²³ However, the uncertainty is whether the outcome of the law suit will confirm that an obligation already existed at the balance sheet, the uncertainty is not whether a future event will create a new obligation at a future date. Therefore, this DSOP takes the view that there is no inconsistency between the proposed treatment of future events in this DSOP and the treatment of law suits under IAS 37.
- 4.107 Entity-specific value reflects future events that would affect the insurer, even if they would not affect other market participants. Fair value reflects only those future events that would affect market participants in general.
- 4.108 The expected present value approach will apply a low probability weighting to any scenario that is inherently unlikely (for example, the development of a major new technology). This should, if applied in an unbiased way, overcome concerns about the use of unjustifiable assumptions about future events. Unbiased application will require that estimates are based on reasonable evidence, particularly for assumptions that are not based on historical experience.
- 4.109 Some IASB standards already require an enterprise to reflect the effects of at least some future events:
- (a) under IAS 19, Employee Benefits:
 - (i) if the level of state benefits affects the level of benefits, the assumptions reflect the effects of changes in state benefits if, and only if (1) those changes were enacted before the balance sheet date or (2) past history, or other reliable evidence, indicates that the state benefits will change in some reliable way, for example, in line with future changes in general price levels or salary levels;²⁴; and

²³ IAS 37, paragraph 16

²⁴ IAS 19, paragraph 83(c)

- (ii) estimates of future medical costs consider the effect of technological advances, changes in health care utilisation or delivery patterns and changes in the health status of plan participants;²⁵
 - (b) under IAS 37, Provisions, Contingent Liabilities and Contingent Assets, the provision for cleaning up a site at the end of its life reflects expected cost reductions from increased experience in applying existing technology. The amount recognised reflects a reasonable expectation of technically qualified, objective observers, taking account of all available evidence as to the technology that will be available at the time of the clean-up;²⁶ and
 - (c) under IAS 40, Investment Property, the fair value of investment property reflects, among other things, rental income from current leases and reasonable and supportable assumptions that represent the market's view of what knowledgeable, willing parties would assume about rental income from future leases in the light of current market conditions.²⁷
- 4.110 As already stated, the measurement of an insurance liability or insurance asset under this DSOP uses the expected present value approach to reflect all future events that may affect future cash flows from the closed book of existing insurance contracts. This approach does not permit accounting for uncertain future events as if they were certain. For example, there may be a 20% probability at the balance sheet date that a major storm will strike during the remaining six months of an insurance contract. After the balance sheet date and before the financial statements are authorised for issue, a storm may actually strike. The measurement of the liability under that contract should not reflect the storm that, with hindsight, is known to have occurred. Instead, the measurement will reflect the 20% probability that was apparent at the balance sheet date (with an appropriate adjustment for risk and uncertainty, as discussed in principle 5.1).
- 4.111 The treatment described in the preceding paragraph is consistent with IAS 10, Events After the Balance Sheet Date. IAS 10 distinguishes between, and gives examples of:
- (a) **adjusting events after the balance sheet date.** These are events after the balance sheet date that provide evidence of conditions that existed at the balance sheet date. They affect recognition and measurement; and
 - (b) **non-adjusting events after the balance sheet date.** These are events that are indicative of conditions that arose after the balance sheet date. They do not affect recognition and measurement. If a non-adjusting event after the balance sheet date is of such importance that non-disclosure would affect the ability of the users of the financial statements to make proper evaluations and decisions, IAS 10 requires an enterprise to disclose the nature of the event and an estimate of its financial effect (or a statement that such an estimate cannot be made).

²⁵ IAS 19, paragraph 89

²⁶ IAS 37, paragraph 49

²⁷ IAS 40, paragraph 33

Inflation

- 4.112 Some believe that cash flows and discount rates should be determined in real (inflation-adjusted) terms. However, in countries where the government does not issue index-linked securities, real interest rates would need to be estimated subjectively from other market data and this may undermine their reliability. Therefore, others believe that discount rates should reflect nominal (stated) interest rates and that cash flows should be estimated in nominal terms. In principle, both approaches give the same answer. Therefore, this DSOP proposes to permit both approaches. In certain cases, it may be easier to apply one method rather than the other.

Entity-specific Cash Flows

- 4.113 An insurer may consider that it will generate cash inflows (or will suffer cash outflows) from a book of insurance contracts that other market participants would not be able to generate (or suffer) if they held the book. Possible reasons for these entity-specific cash flows might be:
- (a) the presence of superior claims management skills, managerial skills or distribution network, an unusually effective system for detecting fraud, actions that limit lapse rates, a monopolistic market position, special tax circumstances that affect only the insurer and would not affect other market participants, or synergies with the insurer's other assets or liabilities; and
 - (b) an intention to settle insurance liabilities differently from the way that other market participants would settle them. For example, an insurer may decide to use its own garages to service motor claims, whereas other market participants might prefer to pay third parties and so incur the profit margin charged by those third parties.
- 4.114 Some suggest that the measurement of insurance liabilities and insurance assets should reflect such entity-specific cash flows. They argue that financial statements should portray the way assets and liabilities are actually used by an enterprise, rather than hypothetical transactions with third parties that are unlikely to occur in the normal course of business.
- 4.115 Others oppose the inclusion of such entity-specific cash flows. They argue that these entity-specific cash flows relate to separate assets or liabilities. These other assets and liabilities should be considered separately for recognition on their own merits and should not be recognised implicitly by being combined in the measurement of the original asset or liability under consideration.
- 4.116 This DSOP proposes that entity-specific cash flows should be included in entity-specific value, but not in fair value.
- 4.117 The Issues Paper proposed that measurement should be based on the market's expectations of future cash flows, rather than the individual insurer's own

expectations. Commentators expressed three particular concerns on the application of this principle to future expense levels:

- (a) the market's expectations are not relevant if the insurer does not intend to, and perhaps cannot, settle the liability;
- (b) the market's expectations are not observable; and
- (c) future expense levels are correlated with future lapse and claim rates because of the implications for the level of service and for claims handling procedures. For example, it could be misleading for an insurer that has very aggressive, but expensive, claims management to combine estimates of its own claims rates with industry average expense levels.

4.118 In following up these concerns, this DSOP identifies two aspects of future expense levels:

- (a) the insurer's strategy for determining the level of service provided to policyholders and its approach to claims management; and
- (b) the insurer's efficiency in providing that level of service and implementing its approach to claims management.

4.119 As the level of service and approach to claims management will have implications for both expense levels and lapse rates, this DSOP concludes that both entity-specific value and fair value will reflect an insurer's strategy for determining the level of service provided to policyholders and its approach to claims management.

4.120 Given its particular service-level strategy and its approach to claims management, an insurer may be more or less efficient than other market participants. It follows from the conclusions in principles 4.4 and 4.5 on entity-specific cash flows that:

- (a) entity-specific value will reflect the insurer's actual efficiency (provided the assumptions made are realistic); and
- (b) fair value will reflect the general level of efficiency in the market, because this would be reflected in the price of an arm's length transaction between knowledgeable, willing parties.

Source of Assumptions

4.121 Even if they have the same ability to generate cash inflows, or propensity to suffer cash outflows, as other market participants, the insurer and other market participants may make different assumptions about the amount, timing or probability of those cash flows. For example, the insurer may have:

- (a) different information about the cash flows than the market as a whole, for example, if the insurer has access to non-public information; or

- (b) the same information as other market participants, but reach different conclusions because it is more or less optimistic about the future than other market participants or because it has superior or inferior decision-making ability.
- 4.122 Conceptually, it might be argued that entity-specific value ought to reflect the insurer's own assumptions, whereas fair value ought to reflect the assumptions made by market participants. In practice, however, this distinction is less significant than may at first appear, because:
- (a) although an insurer will generally have better information than other market participants about the characteristics of insurance contracts, the definition of fair value refers to knowledgeable parties. This implies that the counterparty in the hypothetical transaction used to determine fair value is assumed to have the same level of knowledge as the insurer; and
 - (b) although market prices are often observable directly, the assumptions impounded in those market prices about future cash flows are not observable directly. Therefore, there will rarely be clear evidence that an insurer has not drawn the same conclusions as other market participants.
- 4.123 In practice, therefore, it is more important to consider whether the assumptions are reliable, rather than whether the assumptions are the insurer's own assumptions or the assumptions made by other market participants. For this purpose, this DSOP distinguishes market assumptions and non-market assumptions.
- 4.124 **Market assumptions** are assumptions about variables, such as interest rates and asset prices, that are readily observed in the financial markets. Fair value will clearly reflect such market data. This DSOP takes the view that market assumptions used in determining entity-specific value should also be consistent with market data, as:
- (a) it is easier for users of financial statements to interpret information based on market data than information based on subjective management judgements; and
 - (b) the consensus estimates of market participants are more reliable than estimates by individual enterprises.
- 4.125 **Non-market assumptions** are assumptions about variables, such as claim rates, claim severity, lapse rates and mortality, that are not readily observed in the financial markets. As explained in paragraph 4.18, non-market assumptions will reflect:
- (a) information about claims already reported by policyholders;
 - (b) other information about the known or estimated characteristics of the book of insurance contracts; and

- (c) historical data about the insurer's own experience, supplemented where necessary by historical data from other sources. Historical data is adjusted to the extent that the characteristics of the book differs (or will differ, as a result of anti-selection, as described in paragraph 1.40(g)) from that of the population used as a basis for the historical data. It is also adjusted where there is reliable evidence that historical trends will not continue.

4.126 Existing International Accounting Standards give the following guidance on market and non-market assumptions:

- (a) IAS 19, Employee Benefits, states that:
 - (i) demographic assumptions are an enterprise's best estimates of the variables that will determine the ultimate cost of providing post-employment benefits;²⁸ and
 - (ii) financial assumptions (such as discount rate, future salary and benefit levels, future medical costs, including, where material the cost of administering claims and benefit payments and the expected return on plan assets) are based on market expectations at the balance sheet date for the period over which the obligations are to be settled;²⁹
- (b) IAS 36, Impairment of Assets, states that value in use (an entity-specific value) is based on reasonable and supportable assumptions that represent management's best estimate of the set of economic conditions that will exist over the remaining useful life of the asset.³⁰ In other words, value in use reflects management's expectations of the future cash flows for an asset. However, the discount rate reflects the market's assessment of the time value of money and the risks specific to the asset.³¹
- (c) IAS 37, Provisions, Contingent Liabilities and Contingent Assets, states that the amount recognised as a provision should be the best estimate of the expenditure required to settle the present obligation at the balance sheet date. The best estimate of the expenditure required to settle the present obligation is described as the amount that an enterprise would rationally pay to settle the obligation at the balance sheet date or to transfer it to a third party at that time. The estimates of outcome and financial effect are determined by the judgement of the management of the enterprise, supplemented by experience of similar transactions and, in some cases, reports from independent experts;³² and
- (d) IAS 40, Investment Property, states that the fair value of investment property reflects, among other things, rental income from current leases and reasonable and supportable assumptions that represent the market's view of what

²⁸ IAS 19, paragraph 73

²⁹ IAS 19, paragraph 77

³⁰ IAS 36, paragraph 27(a)

³¹ IAS 36, paragraph 48

³² IAS 37, paragraphs 36-38

knowledgeable, willing parties would assume about rental income from future leases in the light of current market conditions.³³

- 4.127 To secure relevant and reliable information for users and to enhance comparability, it will be necessary to seek a reasonable blend between subjective information gained from an insurer's management and objective information from the insurer's own records and from external sources.
- 4.128 As guidance for determining value in use³⁴, paragraph 27 of IAS 36, Impairment of Assets, seeks to achieve this blend as follows. It requires management to make its best estimates of future conditions, which should be consistent with the most recent financial budgets/forecasts that have been approved by management. However, IAS 36 also requires that greater weight should be given to external evidence than to internal evidence and establishes rebuttable benchmarks for certain assumptions. This approach strikes a balance between the needs for unbiased estimates based on current circumstances and for some constraint to improve reliability and comparability.
- 4.129 Management budgets or forecasts are most likely to reflect a single point estimate, rather than a range of estimates. Therefore, the deterministic guidance in IAS 36 needs some adaptation for use in a stochastic approach, such as the expected present value approach. Under principle 4.4(c), if the budgets and forecasts are deterministic, rather than stochastic, the entire package of scenarios should be consistent with the budgets and forecasts.
- 4.130 Budgets are often deliberately challenging, rather than a genuine estimate of the most likely or expected (mean) cash flows. For measurement purposes, budget assumptions will need to be adjusted to the extent that they are:
- (a) not intended as neutral estimates of future events; or
 - (b) not current and are no longer in line with current market data;
- 4.131 Conceptually, entity-specific value ought to reflect the insurer's own non-market assumptions, whereas fair value ought to reflect non-market assumptions made by market participants in general. In the rare cases when there is clear evidence that other market participants would make non-market assumptions that differ from the insurer's non-market assumptions, entity-specific value should reflect the insurer's assumptions and fair value should reflect the assumptions of market participants in general.

Updating Market Assumptions

- 4.132 Some argue that market assumptions should reflect long-term economic relationships between different variables, such as inflation, rates of salary increase, investment earnings and interest rates, even though the absolute values assumed may not reflect current market data. In their view, this treatment avoids misleading volatility caused

³³ IAS 40, paragraph 33

³⁴ As discussed in principle 3.1, value in use is a form of entity-specific value.

by short-term aberrations in market prices. They argue that short-term fluctuations do not denote definite changes in an insurer's performance, but are indicators which, if not reversed, may accumulate to denote such changes in the future. As insurance is a long-term undertaking, the long-term trend is the best predictor of future performance.

- 4.133 This DSOP proposes that market assumptions should be consistent with current market data. For example, market assumptions should not be demonstrably incompatible with the current market yield curve. Arguments for this approach are that:
- (a) current market data provides information that is more likely than any other to be relevant and reliable and the use of current estimates enhances comparability between enterprises by diminishing the need for subjective estimates of long term trends;
 - (b) assumptions based on current market data are more objective than estimates of long-term trends and provide a more objective basis for determining whether assumptions need to be changed; and
 - (c) in the absence of compelling evidence to the contrary, assumptions about future economic conditions should be based on current economic conditions.
- 4.134 In some cases, there may be no readily observable market data that directly supports market assumptions. In such cases, market assumptions should not be demonstrably incompatible with the current market data that is available. Principle 14.XXX requires disclosures about market assumptions. It also requires disclosure about the methodology used when market data to support market assumptions is not directly observable.
- 4.135 Under some insurance contracts (for example, some unit-linked or variable insurance contracts), part or all of the benefits paid to policyholders are denominated in units reflecting the market price of specified investments or pools of investments. For consistency with current market prices, the present value of those units should be equal to their current fair value. When stochastic modelling is used, the model should be calibrated so that it is consistent with the current fair value of the units.

Updating Non-market Assumptions

- 4.136 Because they are not based on observable market prices, non-market assumptions are inevitably more subjective than market assumptions. Therefore, it is important to determine whether an insurer should adjust its non-market assumptions when there are differences between actual experience and previous non-market assumptions. These differences, sometimes called experience adjustments, may arise for three reasons:
- (a) an insurer may have chosen an incorrect model of future cash flows. For example, it may have assumed that future cash flows are normally distributed, when they actually follow a different distribution. Alternatively, an insurer may have overlooked a factor that will influence the future cash flows;

- (b) an insurer's estimate of the parameters of an underlying probability distribution may differ from the actual parameters. For example, an insurer may estimate that a distribution has a mean of 100 and a standard deviation of 10, when the distribution actually has a mean of 120 and a standard deviation of 15; and
 - (c) random statistical fluctuations are likely even if the insurer has chosen a model that is totally accurate and has correctly estimated the parameters of the distribution under that model. If the risks are uncorrelated, such random fluctuations are smaller for a large population than for a small population (see principle 5.5 for further discussion).
- 4.137 An insurer needs to investigate and understand the reasons for experience adjustments. If experience adjustments suggest that the insurer has used the wrong model, or estimated parameters that differ from the true parameters, the insurer will adjust the model or parameters. If experience adjustments arise solely from random statistical fluctuations, the insurer will not adjust the model or parameters.
- 4.138 This DSOP does not propose methods for establishing the causes of experience adjustments or procedures for updating assumptions about the model and parameters in the light of actual experience. The actuarial profession in some countries has developed such methods and procedures, for example the chain ladder, Bornhuetter-Ferguson and various Bayesian methods, that may be suitable in some cases. The Steering Committee has encouraged the International Actuarial Association to develop similar actuarial guidance at an international level on a basis that is consistent with the objectives and principles expressed in this DSOP.
- 4.139 Non-market assumptions consider not just up-to-date information about the current level of claims, but also well-established historical trends. For example, mortality rates have declined consistently over long periods in many countries. In measuring life insurance liabilities, an insurer would assume that well-established trends will continue unless there is convincing evidence to the contrary.
- 4.140 Some non-market assumptions may interact with market assumptions. For example, lapse rates may be correlated with interest rates. Claim rates for some types of general insurance or health insurance may be correlated with the economic cycle or with inflation rates, and these may in turn be correlated with interest rates or share prices. Where such correlations exist, non-market assumptions should be consistent with market assumptions.

Overheads

Principle 4.6

4.141 The future cash flows used to determine entity-specific value or fair value should include overheads that can be directly attributed to a book of insurance contracts, or allocated to it on a reasonable and consistent basis. These overheads should include a reasonable charge for the consumption of all assets used to generate the cash flows concerned. All other overheads should be excluded.

- 4.142 Some argue that the future cash flows included in present value computations should be only incremental cash flows that relate directly to the asset or liability under review and should not include allocation of overheads. They believe that allocations of overheads have no place in cash flow measurements.
- 4.143 This DSOP takes the view that it is appropriate to include allocations of all overheads that can be directly attributed to a book of insurance contracts, or allocated to it on a reasonable and consistent basis, because:
- (a) overheads represent just as great an economic burden as incremental cash outflows and should, therefore, be included in present value computations in the same way; and
 - (b) the inclusion of overheads does not imply that notional cash flows are included in a forecast of actual cash flows. Their inclusion is a means of pricing the actual cash flows on a basis that is consistent with market prices.
- 4.144 Cash flows that are not directly incremental at one level of aggregation or up to one time horizon may become incremental when viewed at a higher level of aggregation or up to a longer time horizon. For example, salaries are often not adjustable directly over a few days or even weeks. Thus, the staff costs attributed to processing a single transaction may not result in additional salary payments (if the processing does not result in overtime payments), but the processing of a large number of transactions may well increase the total number of staff employed. The level of aggregation reflects the unit of account as discussed in principle 5.5.
- 4.145 Some would accept the inclusion of overheads, but argue that the overheads considered should assume that the level of activity remains at its current level of activity, unless there is clear evidence that the level of activity will change.
- 4.146 Consistent with the requirements of IAS 36, Impairment of Assets, for value in use, this DSOP proposes that estimates of fair value and entity-specific value should be based on cash flows that include overheads that can be directly attributed to an asset or liability, or allocated to it on a reasonable and consistent basis. All other overheads should be excluded. This restriction is necessary to ensure consistent and comparable application in practice. The inclusion of overheads on such a basis does not justify the recognition of future operating losses.
- 4.147 Principles 4.4 and 4.5 concluded that estimates of entity-specific value, such as value in use, should be based on the enterprise's assessment of cash flows and estimates of fair value should, conceptually, be based on market assessments of cash flows. Thus, the level of overhead assumed in estimating entity-specific value may differ from the level of overhead assumed in estimating fair value.
- 4.148 Some would permit the inclusion of only those overheads that will result in future cash flows (such as allocations of wages and salaries). They would prohibit the inclusion of allocations of past costs, such as depreciation. They see depreciation as

an arbitrary allocation that does not necessarily give a valid measure of the consumption of economic benefits.

4.149 This DSOP proposes that the expected present value of future cash flows should include a reasonable charge for the consumption of all assets used to generate the cash flows concerned, because:

- (a) the exclusion of depreciation would lead to an inconsistency between an enterprise that owns an asset and an enterprise that holds a similar asset under an operating lease. It may also provide arbitrage opportunities, as an enterprise may be able to choose whether it consumes internal resources or hires external resources;
- (b) some see depreciation as a surrogate for cash or as an opportunity cost³⁵ of consuming economic benefits. For example, consider two insurers with identical obligations to pay for car repairs under car insurance contracts. Insurer A will pay cash to the policyholder (or to a third party garage). Clearly, the price charged by the third party garage will be influenced by, among other things, the opportunity cost of using its property, plant and equipment to carry out the repairs rather than for other purposes. Insurer B will use its own repair garage. Insurer B may not incur direct future cash outflows for its own property, plant and equipment, but it will incur an opportunity cost because the property, plant and equipment used in the repairs is not available for other uses. It would be misleading for Insurer B to report a significantly lower obligation by omitting this opportunity cost; and
- (c) market participants would attempt to recover overheads (including the consumption of non-cash resources embodying economic benefits) in the prices that they would attempt to obtain for a sale. It follows that estimates of fair value reflect such overheads. Furthermore, there is no reason to apply a different principle to estimates of entity-specific value.

4.150 The following is further guidance on the notion of a reasonable charge for the consumption of an asset.

- (a) For entity-specific value, a reasonable charge is the opportunity cost to the enterprise of the asset. In practice, an enterprise should assume that the opportunity cost is equal to the price that the market would charge, unless there is reasonable evidence that the opportunity cost to the enterprise is different. In certain cases, accounting depreciation may be a reasonable surrogate for the consumption of economic benefits as those assets are used. However, it cannot be assumed that this will always be the case. If estimates of future cash flows include capital expenditure, no charge should be made for the consumption of the asset acquired, as this would be double counting.

³⁵ An opportunity cost is the cost of using a resource, measured by the benefit from the next-best alternative use of that resource

- (b) For fair value, a reasonable charge is the price that the market would charge for the use of the asset, as market participants would consider the opportunity cost of using those assets for this purpose.
- 4.151 If an enterprise is able to satisfy part or all of a liability by using its own assets or other internal resources, the entity-specific value of the liability should include the overhead and risk premium that the enterprise would include in pricing such resources for arms' length sale to a third party in the normal course of business. However, that entity-specific value excludes any profit margin (beyond the required risk margin), unless there is clear evidence that internal use of that resource would displace an arms' length sale to a third party in the normal course of business.
- 4.152 Principle 4.6 refers to a reasonable charge for the consumption of assets used to generate the cash flows from a book of insurance contracts. This reference does not permit the inclusion of a charge for the use of regulatory-required capital or risk-based capital. Principle 4.3 prohibits the inclusion of such charges.

Transaction Costs

Principle 4.7

4.153 *The fair value of an insurance liability (insurance asset) should be determined without adding (deducting) transaction costs that would be incurred on a settlement (sale).*

- 4.154 The conclusion in principle 3.1 that fair value should reflect exit values implies a need to consider the impact of the transaction costs that would be incurred on disposal. Some argue that estimates of fair value should reflect any transaction costs that an enterprise would incur in selling an asset or settling a liability. They argue that:
- (a) an enterprise would need to incur these costs before it could realise the full value of the asset or liability;
 - (b) such an exit cost measure of fair value is the most relevant and understandable measure for users of financial statements; and
 - (c) the consistent use of an exit value measure means that an enterprise cannot manipulate its reported net profit by a decision to sell an asset or settle a liability.
- 4.155 For the following reasons, this DSOP proposes that that estimates of fair value should not reflect transaction costs:
- (a) an enterprise has no obligation to incur those costs until it is committed to a transaction and may never incur them if it holds the asset or liability until maturity or until the end of its useful life. Even if the enterprise does incur the costs, it may not do so for many years and so their present value may be far less than their nominal amount. Indeed, in some cases an enterprise may not

be able to dispose of an asset or, particularly, settle an insurance liability before maturity;

- (b) transaction costs create imperfections in the market. These imperfections create a band of imprecision about the fair value of an item. All that can be said is that fair value of an asset³⁶ lies somewhere in between an upper limit equal to the replacement cost (including transaction costs that would be incurred on acquisition) and a lower limit equal to net selling price (after deducting transaction costs that would be incurred on disposal). There is no principled basis for determining where fair value lies within that band. In a seller's market, fair value might lie closer to the upper limit and in a buyer's market, fair value might lie closer to the lower limit. Some see this as a basis for concluding that fair value should normally be determined as the mid-point in the bid-asked range;
- (c) the fair value of an asset (liability) is a market-based representation of the value of future cash flows from the asset (liability), regardless of whether the enterprise is likely to sell (settle) the asset (liability) in the near future. Measurement at fair value is not intended as a representation that a sale (settlement) could, or should, be made in the near future;
- (d) making a deduction for transaction costs would contradict the Framework, which states that when liabilities are carried at present value, they are carried at the present discounted value of the future net cash outflows that are expected to be required to settle the liabilities in the normal course of business;³⁷ and
- (e) the Joint Working Group on Financial Instruments proposes that fair value should be determined without deducting costs that the enterprise would incur to sell a financial asset or obtain relief from a financial liability, for example, fees and commissions paid to agents, advisors, brokers and dealers, duties and transfer taxes. The JWG argues that such exit costs will not be significant in many cases, and would be difficult to measure in other situations because they can vary significantly depending on the type of transaction.³⁸

4.156 Some argue that the spread between bid and asked prices in an active dealer market represents an exit cost included in the quoted price. Because removing exit costs presumed to be included in bid or asked prices could be difficult if not impossible, the JWG proposes to permit the use of the mid-point between quoted bid and asked prices for instruments traded in active markets where the differences between bid and asked prices are small. Where those differences are large, the JWG proposes that enterprises should estimate the price that they would expect to receive for assets or pay to be relieved of liabilities whether it is the bid price, the asked price or another price within that range.³⁹

³⁶ For simplicity, the discussion refers only to assets. Similar arguments apply to liabilities

³⁷ Framework, paragraph 100(d)

³⁸ JWG Draft, paragraphs 72-73 and 4.11

³⁹ JWG Draft, paragraphs 80-81 and 4.17

4.157 The JWG defines fair value as “an estimate of the price an enterprise would have received if it had sold an asset or been relieved of a liability on the measurement date in an arm’s-length exchange transaction motivated by normal business considerations.” The JWG states that the fair value of a financial instrument is an estimate of its market exit price, which is determined by interactions between unrelated enterprises that have the objective of achieving the maximum benefit or minimum sacrifice from the transaction. That is, the price that arm’s-length market participants would pay or receive in a routine transaction under the market conditions at the date at which it is to be measured for accounting purposes (the measurement date).⁴⁰

Transaction Costs – Entity-specific Value

4.158 For entity-specific value, transaction costs will not generally be relevant. However, if the insurer does expect to transfer the liability, any transaction costs that would be incurred on the transfer will be included in estimated claims handling costs (see paragraph 4.27).

An Insurer’s Own Credit Standing

Principle 4.8

4.159 The entity-specific value of an insurance liability should not reflect the insurer’s own credit standing. Conceptually fair value should reflect the insurer’s own credit standing, but this would have practical implications that need further investigation.

4.160 Almost all respondents to the Issues Paper were strongly opposed to the notion that the measurement of an insurance liability might reflect the insurer’s own credit standing. The concerns fall into two categories.

- (a) General concerns about the relevance and reliability of reflecting the issuer’s own credit standing in the measurement of any financial liability. As this issue will be discussed extensively when the Board reviews responses to the JWG Draft, this DSOP does not discuss these concerns further.
- (b) Additional specific objections to reflecting the issuer’s own credit standing in measuring insurance liabilities:
 - (i) measurement based on the insurer’s own credit standing would be inconsistent with the fact that insurers intend to meet all valid claims in full. Any other assumption would be unethical and contrary to public policy. Although similar considerations apply to all entities, this is particularly sensitive for insurers because of the need to protect consumers;

⁴⁰ JWG Draft, paragraph 28 and 70-7171

- (ii) premium rates, arguably, do not reflect the insurer's credit standing. If policyholders conclude that an insurer's credit standing exceeds an acceptable minimum level, they are prepared to transact with that insurer. Their willingness to pay a particular level of premiums is not conditional on perceptions of further distinctions in the insurer's credit standing; and
- (iii) if the insurer's reported insurance liability declines with a fall in its own credit standing, policyholders and supervisors may find it harder to assess the insurer's solvency.

- 4.161 In practice, for many regulated insurers, the impact of their own credit standing may be negligible, given supervisory procedures that aim to minimise the possibility of any losses to policyholders. However, in some cases, the impact may be material. High quality supervision does not exist in all countries, particularly for reinsurance. Moreover, high quality supervision does not preclude the possibility that policyholders may suffer losses in some cases. Also, the DSOP applies to all issuers of insurance contracts, not just to regulated insurers.
- 4.162 In some countries, some policyholder liabilities are guaranteed by government or sector guarantee funds. Paragraphs 373-375 and 4.63 of the JWG Draft discuss some of the implications of such funds for the measurement of the guaranteed liabilities.
- 4.163 Entity-specific value refers to settlement with policyholders or other beneficiaries in an orderly fashion over the life of the liability. This DSOP takes the view that an entity's own credit standing is not relevant in this context.
- 4.164 Conceptually fair value should reflect the insurer's own credit standing. However, the Steering Committee shares concerns expressed by commentators on the Issues Paper about the practical implications of reflecting the insurer's own credit standing. The Steering Committee urges the Board to assess these concerns very carefully before concluding finally on this issue, both for liabilities in general and for insurance liabilities in particular.

Recoveries Related to Claims

Principle 4.9

4.165 Until rights to recoveries qualify for recognition as an asset under the following paragraph, an insurer should:

- (a) include potential recoveries from salvage and subrogation in estimated future cash flows from existing insurance contracts; and***
- (b) not recognise those rights to recoveries as separate assets.***

4.166 An insurer should recognise rights to recoveries, such as salvage rights and subrogation rights, as an asset when, and only when:

- (a) *the insurer controls those rights, as a result of past events;*
- (b) *it is probable that the economic benefits associated with those rights will flow to the insurer; and*
- (c) *the insurer can measure those rights reliably. An insurer should measure those rights (including salvage property acquired by exercising those rights) at entity-specific value if insurance liabilities are measured at entity-specific value, and at fair value if insurance liabilities are measured at fair value.*

4.167 An insurance contract often gives the insurer the right to sell (usually damaged) property acquired in settling the claim (salvage). The insurer may also have the right to pursue third parties for payment of some or all costs (subrogation).

4.168 IAS 37 deals with two related areas, expected disposals of assets and reimbursements.

- (a) Gains on the expected disposal of assets are not taken into account in measuring a provision, even if the expected disposal is closely linked to the event giving rise to the provision. Instead, an enterprise recognises gains on expected disposals of assets at the time specified by the International Accounting Standard dealing with the assets concerned.⁴¹
- (b) Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement should be recognised when, and only when, it is virtually certain that reimbursement will be received if the enterprise settles the obligation. Because the enterprise would have to settle the full amount if the third party failed to pay, the enterprise should recognise the reimbursement as a separate asset, not as a deduction from the provision. The amount recognised for the reimbursement should not exceed the amount of the provision. In the income statement, the expense relating to a provision may be presented net of the amount recognised for a reimbursement.⁴²

4.169 IAS 37 contemplates cases where an enterprise pays the creditor and then obtains a recovery by selling an asset or by claiming reimbursement from another party. However, salvage and subrogation differ because the insurer pays the claim and, at the same time, receives salvage or subrogation rights from the policyholder (rather than from another party). In other words, the insurer's obligation is to make a net settlement, comprising a cash payment less the fair value of the simultaneous receipt of salvage or subrogation rights. Market participants would take both the cash payment and the salvage or subrogation rights into account when they price the insurer's (net) obligation. Therefore, this DSOP proposes that insurance liabilities should be measured net of the impact of related salvage and subrogation rights that the insurer would exercise on paying a claim.⁴³

⁴¹ IAS 37, paragraphs 51 and 52.

⁴² IAS 37, paragraphs 53-56

⁴³ Because those rights reduce the measurement of the liability, some describe them as a **contra-liability**.

- 4.170 Such a net presentation is consistent with IAS 32, Financial Instruments: Disclosure and Presentation. Under paragraph 33 of IAS 32, a financial asset and a financial liability should be offset and the net amount reported in the balance sheet when an enterprise:
- (a) has a legally enforceable right to set off the recognised amounts; and
 - (b) intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.
- 4.171 Once an insurer acquires salvage or subrogation rights (generally by paying a claim under the insurance contract), the insurer has an asset. Some argue that an insurer should:
- (a) measure salvage property at depreciated cost (or depreciated revalued amount), consistent with IAS 16, Property, Plant and Equipment; and
 - (b) not recognise subrogation rights until the receipt of cash is virtually certain. This is consistent with the treatment of contingent assets (such as a legal claim that an enterprise is pursuing) under IAS 37. IAS 37 prohibits the recognition of contingent assets (until the recognition of income is virtually certain, at which point the asset is no longer contingent).
- 4.172 Some regard the separate recognition of salvage or subrogation rights as compatible with the treatment of contingent assets under IAS 37. IAS 37 defines a contingent asset as “a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the enterprise.” They conclude that a contingent asset arises when it is not certain whether an asset yet exists; by contrast, when an insurer acquires salvage or subrogation rights on satisfying an insurance claim, the insurer acquires an asset - even if there is uncertainty about the amount or timing of resulting cash flows.
- 4.173 This DSOP proposes that salvage property and subrogation rights should be measured (both initially and on subsequent measurement) on the same basis as the underlying insurance liability. This will avoid discontinuities in measurement at the point when the salvage property and subrogation rights are first recognised as separate assets, rather than as a potential cash inflow deducted in determining the carrying amount of the related insurance liability.

Provisions for Catastrophes and Equalisation

Principle 4.10

4.174 An insurer should not recognise catastrophe provisions relating to possible future claims beyond the end of the contracts included in the closed book. Similarly, an insurer should not recognise equalisation provisions to cover random fluctuations of claim expenses around the expected value of claims.

- 4.175 In some jurisdictions, insurers are permitted or required to set up catastrophe provisions, usually following a prescribed formula, for future claims arising under future contracts that will cover infrequent but severe catastrophic losses - such as damage to nuclear installations or satellites or earthquake damage. For example, in one country, insurers may set up catastrophe provisions for pharmaceutical product liability insurance: if premiums exceed claims for the year, they transfer 75% of the difference to the provision. The maximum provision is 15 times the earned premiums. If claims exceed premiums, the provision is decreased.
- 4.176 Some countries also permit or require equalisation provisions to cover random fluctuations of claim expenses around the expected value of claims. For example, some countries permit equalisation provisions for certain lines (e.g. hail, credit, guarantee and fidelity insurance) using a formula based on actual experience over a number of years. If claims are below average, an amount is transferred to the provision. If losses are above average, the provision is reduced. The maximum amount of the provision reflects the standard deviation of actual losses and annual premiums.
- 4.177 Those who favour recognising catastrophe and/or equalisation provisions as liabilities base their view on one or more of the following arguments:
- (a) such provisions represent a deferral of unearned premiums because the contract is priced in such a way that part of the premium (the catastrophe premium) is designed to provide for events that are not expected, on average, to occur in any single contract period but are expected to occur over an entire cycle of several contract periods. Although contracts cover only one period in form, in substance contracts are commonly renewed, leading to pooling of risks over time rather than spatially;
 - (b) in some jurisdictions, such as Japan, the insurance law requires an insurer to segregate catastrophe premiums so that they are not available for distribution to shareholders (except on liquidation) and must be transferred to another insurer if the original insurer's solvency falls below a specified level. Thus, policyholders implicitly agree that the premiums they pay include these catastrophe premiums and the receipt of the catastrophe premium creates a legal or constructive obligation for the insurer to continue to provide cover in future periods. Furthermore, if the insurer transferred its contractual obligations to another insurer, it would need to transfer the catastrophe premium as well. Therefore, the fair value of the contractual obligations includes the catastrophe premiums that must be transferred at the same time;
 - (c) by matching costs and revenue over the long term, such provisions lead to a more faithful portrayal of an insurer's long-term profitability in years when no catastrophe occurs (or when claims are abnormally low). Also, they show a pattern of reported income similar to one obtained through reinsurance, but with less cost and administrative burden;

- (d) such provisions enhance solvency protection by restricting the amounts distributed to stockholders and by restricting a weak company's ability to expand or enter new markets;
- (e) such provisions encourage insurers to accept risks that they might otherwise decline. Some countries reinforce this encouragement with tax deductions; and
- (f) insurers sometimes have little or no discretion to withdraw from a particular region or to cease offering a particular type of insurance contract. For example, if an insurer wishes to sell automotive coverage, regulatory authorities may require that the insurer also offer hurricane coverage. While the insurer has no current obligation for hurricanes beyond the term of existing contracts, the regulatory regime has created a constructive obligation to offer hurricane coverage in the future.

4.178 Consistent with the closed book approach (see principle 2.2), this DSOP prohibits the recognition of catastrophe and equalisation provisions, because:

- (a) such provisions are not liabilities under the definition in the Framework and in IAS 37, Provisions, Contingent Liabilities and Contingent Assets, as the insurer has no present obligation for catastrophic losses that will occur after the end of the current contract period. The Framework states that the matching concept does not allow the recognition of items in the balance sheet which do not meet the definition of assets or liabilities;
- (b) if an insurer expects to continue writing catastrophe cover, presumably the insurer believes that the future business will be profitable. It would be unusual to recognise a liability for future contracts that are expected to be profitable;
- (c) even if the insurance law requires an insurer to segregate catastrophe premiums so that they are not available for distribution to shareholders in any circumstances, earnings on those segregated premiums will ultimately be available to shareholders. Therefore, those segregated amounts are appropriately classified as equity, not as a liability;
- (d) the analogy with reinsurance contracts is irrelevant, because reinsurance changes the insurer's risk profile;
- (e) if one objective of such provisions is to enhance solvency, the insurer should record the entire amount of the provision immediately, rather than accumulating the provision over time. Also, if diversification over time is a valid basis for accounting, above-average losses in early years should be recognised as assets, yet proponents of catastrophe and equalisation provisions do not advocate this. Furthermore, if future catastrophes (or unusual experience) in one period are independent of those in other periods, the insurer should not reduce the liability when a catastrophe (or unusually bad experience) occurs;

- (f) the objective of general purpose financial statements is not to encourage or discourage particular transactions or activities, but to report neutral information about transactions and activities. Therefore, it is not appropriate to establish accounting requirements with the aim of encouraging insurers to accept or decline particular types of risks;
- (g) recognising such provisions obscures users' ability to examine the impact of past catastrophes and does not contribute to their analysis of an insurer's exposure to future catastrophes. Given adequate disclosure (see principle 14.XXX), knowledgeable users understand that certain types of insurance contract expose an insurer to infrequent but severe losses;
- (h) the recognition of catastrophe and/or equalisation provisions is not the only way to limit distributions to stockholders. Other techniques, such as solvency margin requirements and risk-based capital requirements could play an important role. Another possibility would be to require insurers to segregate a portion of their equity to show that some of their existing capital must be retained against the possibility of adverse results in future years; and
- (i) because catastrophe and equalisation provisions relating to future contracts do not arise from a past event, there is no objective way to measure the provisions, unless an arbitrary formula is used.

4.179 Although this DSOP does not permit the recognition of catastrophe provisions relating to claims arising under future contracts, the expected present value of future cash flows under existing contracts does include the probability-weighted present value of payments for catastrophic claims. For example, if there is a 5% chance that an earthquake during the remaining term of an existing contract will give rise to losses with a present value of 1,000,000, the expected value of the cash flows includes a cash outflow of 50,000 (1,000,000 @5%) for the catastrophe losses. In addition, principle 5.1 would require an adjustment for risk and uncertainty. However, unlike most existing regimes for catastrophe provisions, which are designed to be built up over a cycle of several years, the adjustment for risk and uncertainty will reflect only the amount of risk inherent in the remaining term of the contract.

Acquisition Costs

Principle 4.11

4.180 Acquisition costs should be recognised as an expense when they are incurred.

4.181 Acquisition costs are the costs that an insurer incurs to sell, underwrite, and initiate a new insurance contract. When a deferral and matching approach is used, acquisition costs are often deferred, by either recognising the deferred acquisition costs as if they were an asset, or by deducting them in measuring the insurance liability; the deferred acquisition costs are then amortised in a manner that matches them with premium revenue. Supporters argue that this approach is necessary to avoid distortions. If acquisition costs are recognised immediately as an expense while “unearned”

premium is deferred, a loss will generally be recognised when an insurer first recognises an insurance contract. As a result, a growing insurer may appear financially weak, even if it enters into profitable insurance contracts, whereas an insurer that is contracting could appear financially strong.

- 4.182 This DSOP proposes that deferral of acquisition costs should be prohibited, as acquisition costs do not meet the Framework's definition of an asset. Arguably, acquisition costs might be viewed as the cost of contractual rights that are a recognisable asset. However, under the proposals in this DSOP, the measurement of insurance liabilities already reflects the future cash flows to be generated by the insurance contract, so the recognition of those contractual rights as an asset would lead to double counting.
- 4.183 For some short-term insurance contracts, although neither the policyholder nor the insurer has a right to require renewal of the contract, a high (and sometimes predictable) percentage of contracts are renewed. In some cases, the insurer may incur acquisition costs that exceed the present value of the expected profit from the initial contract, in the expectation of recovering the excess from renewals. Some argue that an insurer should be permitted to defer that part of the acquisition costs, in order to match them with estimated future renewals - and so avoid reporting a loss in the first year of a customer relationship that is forecast to be profitable.
- 4.184 IAS 38, Intangible Assets, argues that customer relationships do not meet the definition of intangible assets and prohibits the recognition as an asset of expenditure on internally generated brands, customer lists and items similar in substance.⁴⁴ For similar reasons, this DSOP prohibits the recognition as an asset of deferred acquisition costs – even in the cases described in the previous paragraph. The loss reported in this case in the first is no different from the result obtained in any other sector when the enterprise spends money on, for example, advertising, sales commission or introductory offers to acquire new customers in the reasonable expectation of repeat business.
- 4.185 As explained in principle 4.2, the closed book of existing insurance contracts includes certain renewals. Costs incurred to to sell, underwrite, and initiate those renewals are policy administration or maintenance costs, not acquisition costs. Principle 13.5 addresses disclosure about acquisition costs, among other things. Principle 13.5 also considers the distinction between acquisition costs and policy administration costs.

⁴⁴ IAS 38, paragraphs 16 and 52