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A Reliable Fair Value for Insurance Contracts

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In 1997, the IASC (predecessor of today's International Accounting Standards Board – IASB) started a project on accounting for insurance contracts. At the end of 2001 and beginning of 2002, it published a Draft Statement of Principles (DSOP) for an International Financial Reporting Standard Insurance Contracts. This proposal was based on a fair value accounting on assets and liabilities arising from insurance contracts. Whereas a fair value is relatively easily applicable for financial instruments that are traded at active markets, the key problem for the measurement of insurance contracts is that there do not exist active markets. The proposal for a full fair value accounting for insurance entities did therefore not find a broad acceptance in the insurance industry.[1] The IASB has now re-started the discussion of an International Financial Reporting Standard Insurance Contracts replacing the interim solution of IFRS 4.
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Introduction

Since 1997, the IASB (and its predecessor, the IASC) has been closely examining the accounting for insurance contracts.[2] Its target is to achieve a harmonization of the very diversified accounting approaches currently globally used in the insurance industry. The IASB is currently concentrating mainly on fair value approaches, such as current entry or exit value. In particular, profit recognition, consideration of initial cost and renewals cause significant concerns for the many interested parties (industry, accounting profession and analysts). Up to now, most features were considered separately and only in connection with very specific, mainly investment-oriented products. This article discusses a possible solution based on the IASB Framework. It proposes a more integral view of all accounting issues, especially considering the characteristics of most common insurance contracts.

Main insurance features

According to IFRS 4, the defining feature of an insurance contract is the transfer of a risk specific for the policyholder. The purpose of such a transfer is the utilization of

[1] Dickinson (2003, p. 151); Dickinson and Liedtke (2004, p. 540).
[2] For current development, see Bloomer (2005, p. 101).

risk mitigation in a pool of similar but independent risks aggregated by the insurer.[3] From the insurer's viewpoint, that approach causes some specific consequences. The aggregation of very similar risks requires a very active, narrow-focused sales approach, usually with significant initial costs. A part of those costs is spent for the initial test of whether the proposed risk actually fits the risk profile of the pool. Considering that initial barrier, policyholders require, at least in life insurance, long-term continuation rights (guaranteed insurability). On the other hand, insurers do not have any ability to assess the individual risk situation after the outset of an insurance contract, that is the individual insurance contract becomes an integral statistical part of the pool. Insurers therefore manage insurance contracts only on a pool basis and will not trade with individual liabilities. Only pools of contracts, with common statistical characteristics and separately monitored, can be transferred or ceded.

Especially in life insurance, but also in the case of some traditionally styled mutual companies, risks (as well as chances) remaining after use of the pool approach (especially risks of long-term changes of circumstances which cumulatively affect all risks in the pool) are re-transferred to policyholders by a refund of premiums not required. Such performance-linked features have a significant role in insurance business. In many jurisdictions, insurance contracts grant insurers a significant discretion in determining policyholders' benefits, especially in the case of surrender or participation benefits, while in others, any contractual benefit is subject to strict contractual provisions.

The complexity of the benefit trigger, the insured event, often means that there is a significant lapse of time between occurrence of the insured event and the actual settlement of the claim. The knowledge of the specific situation of the individual contract, lost after outset of the contract, is after the coverage period regained step by step during the settlement process. Insurers might have some influence with regard to the speed of the settlement process, reducing liquidity risks.

Traditionally, the relationship between policyholders and insurers is significantly shaped by a reciprocal trust, where policyholders' economic existence often relies on the claims payment ability of the insurer in the long run, while insurers depend on the honesty of policyholders, and a long-term relationship, to underpin the pool.

Prepayment of premiums causes remarkable investment features in contracts, especially if the time lag between premium payment and benefit payment is very long. In many life contracts, that investment feature is intentionally extended by providing benefits payable with a very high probability, like survival payments or even payments certain.

The complexity and sensitivity of the business and its relevance for the total economy and social security causes the insurance industry to be state regulated to a considerable extent. There is usually a close regulation of the utilization (i.e., investment) of aggregated net cash flows together with strict capital requirements to achieve a generally accepted level of claims payment ability over the life of contracts written. There is no freedom to use those funds (e.g., to invest in subsidiaries) but there are often requirements to invest in a well diversified and spread manner. The

[3] Tosetti et al. (2001, p. 238).

remaining credit risk in comparison with a risk-free investment is accepted for the purpose of a better price/benefit relationship.

Basic accounting concept for insurance contracts

The IASB is currently considering two approaches, which can be broadly described as "current entry value" and "current exit value".

Current entry value

The current entry value means that the current rate book is the basis of initial and, for existing business, of subsequent measurement. It is combined with a prospective approach for claims liabilities and a liability adequacy test for the stand-ready obligation, both with risk weights. Principally at any reporting date the liability for a contract (stand-ready obligation) is reported at the price currently charged for new contracts with the same overall cash flows as the remaining future cash flows of the contract to be measured. Whenever the insurer changes the rate book for new business, the insurance liability for the entire existing portfolio is remeasured on that basis. The introduction of the current entry value, which is entirely new, was intended to solve the problem of insufficient market data by using the current premium scale of the insurer as reliable measurement basis.

That approach causes two significant difficulties. Firstly, insurers do not usually sell cover that is comparable with the remaining coverage of existing contracts. In non-life insurance, cover is normally only provided for full years – there are no prices observable for shorter periods. In particular, seasonal risks cannot be insured for shorter than annual periods. Monthly premiums cannot be reasonably determined based on annual premiums. In life insurance, the remaining coverage includes both current premiums for future periods and a part of past premiums to support future coverage. That is comparable with a new contract with both a single premium at outset and subsequently current premiums. Such business is usually not offered. It would be necessary to assess the pricing parameters used rather than simply look to the rate book, requiring some judgment in measurement. It was the intention of the current entry value approach to avoid such judgment.

Pricing cycles in insurance business are for several practical reasons very long in comparison with accounting periods. The steps in rate books would cause significant steps in accounts. Insurers would be induced to consider the accounting effect in their pricing decisions. Such an impact of accounting on business decisions is not desirable.

For non-life an alternative approach is discussed, where the premium is recognized as revenue over the period of risk, in proportion to the amount of insurance protection provided (unearned premium liability).[4] The release of premiums is locked-in, except if inadequacy is detected in applying the liability adequacy test. That raises the question, how to distinguish life insurance and non-life insurance. In US-GAAP and some other national GAAPs, contracts provide insurance protection evenly during the contract duration, which is in addition short enough that there is no significant discounting

[4] IASB Update (May 2005).

effect.[5] However, under such circumstances, the difference between unearned premium liability and initial entry value will be immaterial. The unearned premium liability is only formally a retrospective value (deferral), but in reality a simplified prospective value in the cases where it is applied. Hence, the unearned premium liability concept can be seen as a simplification of the entry value, assuming that there is no significant review of the rate book during the short contract duration. There is no conceptual reasoning for providing two approaches, hence questionable rules would be needed to define the scope of each approach. The type of risk should not be decisive for the accounting treatment.

Current exit value

The current exit value is based on a fully prospective approach applying the most recent knowledge at each reporting date, including risk weights. However, that concept is anything but new and generally accepted. Most existing insurance accounting approaches are derivations of that idea. Some constraints are applied in response to the significant statistical vagueness unavoidably connected with any statistical estimation of future cash flows in the absence of observable market prices. As a consequence, typically a conservative recognition of gains is required, resulting usually in guidance for a systematic recognition, often styled in the form of a deferral and matching approach. Although that statistical vagueness is present in each accounting estimate, it is of particular relevance in the insurance business. The business purpose of insurance is the acceptance of uncertainty based on statistical estimations. Other services are only supplemental as far as they are required for that purpose. The liabilities are to be estimated for issues with a statistical vagueness. This vagueness is, in the case of short duration contracts, large in absolute terms but, in other cases, significant as a consequence of the often extremely long duration. Nearly all the liabilities of the entity consist of homogenous types of uncertainties. Only a very few experts, deeply familiar with the peculiarities of the specific entity, are able to provide such estimations. The statistical vagueness gives rise to a range of measurement parameters which allow significant accounting discretion (affecting, cumulatively, the entire balance sheet). That discretion in determining liabilities has particularly an impact on the income statement, especially considering the leverage of long durations. The range of outcomes, which can be justified based on the available statistical data, is not narrow enough to achieve a robust result. Hence, existing accounting approaches concentrated on that issue and attempted to limit such discretion by prohibiting initial gains, locking-in measurement parameters, etc.

Proposed improvement

Principle based

The use of a principle-based prospective approach requires to consider nevertheless the limitations of that approach to be as robust as existing approaches. Rules-based

[5] A similar guidance is provided by IFRS 3.B16 (j).

traditional limitations are not flexible enough to allow an adequate measurement of the very wide variety of products of insurers worldwide, especially more investment-oriented products. On the other hand, approaches relying purely on actuarial judgment in valuation techniques are not robust enough for insurance products with significant statistical vagueness. However, the permission to make use of any positively evidenced knowledge as gained, for example, in markets or based on other impartial observations would be a step forward compared with existing approaches. Actuaries developed, in past decades, powerful methods to make available any piece of information existing, but in the absence of sufficient information the results do not contribute to a robust measurement.

The main intention of any new accounting approach for insurance contracts should be a strict compliance with the IASB Framework and a consistency with accounting approaches as applied for items, which often form components of insurance contracts (such as financial instruments, service contracts and contingent liabilities). Accounting arbitrage should be avoided.

Most importantly, to provide a relevant information to users, an entirely prospective approach is advocated where only the vagueness of current estimations causes a need of a comparison with the most recent prior valuation.

However, there are significant constraints involved in such a principle-based approach in comparison with some traditional approaches – this is particularly so in cases where policyholders hold continuation rights and the insurers are not able to enforce continuation. Some recognition of future continuations considers the historical main service of insurers to aggregate and maintain an adequate pool for risk mitigation. However, excluding future gains from renewals in recognition shows similar results as in traditional net premium approaches – without the artificial deferral attitude.

For the reason of reliability, the approach should be a robust response to the significant statistical vagueness inherent in any measurement of insurance liabilities. Therefore the prospective approach is limited by a comparison against the most recent prior valuation to decide whether any gain or loss arising in the income statement as a consequence of choosing assumptions other than those applied before is actually based on positive evidence for the movement of the entire liability. Artificial volatility of results would not be in compliance with the qualitative characters of relevance and reliability. Nevertheless, the measurement parameters are reviewed and may result in a new pattern of future revenue recognition, even if the statistical vagueness does not justify the immediate recognition of gains or losses (“prospective unlocking”).

However, there should be no artificial rules prohibiting the reflection of relevant knowledge actually available. In most cases of significant statistical vagueness, the outcome of the proposed approach will be very similar to that of existing robust insurance accounting approaches. However, the proposed approach permits the flexibility to make use of positively evidenced knowledge.

Initial recognition and measurement

At outset, all present rights and obligations under the insurance contract are to be recognized. That does not include future premiums that are not controlled by the

insurer. Future benefits, which are not payable without continuation of premium payment, are only recognized insofar as they reflect valuable unilateral continuation rights of policyholders exceeding the value of related future unenforceable premiums. That limitation applies further to future interest margins and other earnings from past premiums subject to persistency if policyholders have a unilateral termination right regarding the entire contract.

Those rights and obligations are measured at their fair value, both for life and non-life insurance. Fair values of insurance contracts are normally not observable in markets, except in intermediary markets at outset. Hence, those fair values need to be modelled in a valuation technique.[6] The model chosen is the present mean value of future risk weighted cash flows. The risk weight included within recognized cash flows reflects the risk averseness of market participants, and the discounting uses the risk-free market interest rate for equivalent cash flow durations. Further, any burden caused by regulatory requirements affecting any insurer holding the business, like restrictions in utilizing aggregated net cash flows or minimum capital requirements, needs to be considered within the cash flows.

The basis of the measurement is the exit value of the individual contract at outset. At that time (i.e., immediately after risk assessment in the underwriting process) any contract can be theoretically transferred or ceded individually.[7] However, in determining that exit value, legal (especially regulatory) constraints in transferring or ceding those contracts often existing for insurance entities have to be considered. Although there is individual knowledge about the risk at outset, the initial measurement should reflect the addition of the contract to the pool, that is, the risk weight should consider the ability of the acquiring insurer to mitigate that risk in the pool. It can be assumed that the insurer would not have entered into the contract without having such a pool available.

Reflection of statistical vagueness

The values of the risk weighted cash flows of insurance contracts, and their probabilities to determine the mean value, are normally not directly observable in markets. Even discount rates for extremely long durations, as are often present in insurance contracts, cannot be determined directly based on market observations. Hence, many measurement parameters for the valuation technique need to be estimated by statistical means. All statistical estimations result in a range of outcomes for the total value at a given confidence level; within that range there is no further identification of preferred amounts possible. It can be questioned whether an arbitrary choice of measurement parameters within that range is robust enough from an accounting perspective.[8] That choice will often result in a specific initial gain or loss

[6] The adequacy of the model is premised by IFRSs, not derived from observed data. If the measurement parameters of the valuation technique are uncertain or unknown those are derived applying statistical estimations. A distinguishing is needed between the accounting assumptions regarding the model and the estimation of values of the model.

[7] FASB (2005) proposes to determine the unit of account based on such a consideration.

[8] Dickinson and Liedtke (2004, pp. 540, 566).

but also a lower or even neutral initial outcome would be reasonably justifiable by the statistically evaluated range of parameters. The solution of IAS 37.39, namely to use the mid-point of the range, is not adequate here since, in the case of contingent liabilities which are not acquired but occur as result of business operations, there is always a loss recognized – the only question is what its size is. The insurance contract is acquired in a market (intermediary market) and therefore there is at least some indication that the lowest justifiable difference to acquisition cost, if any, should be chosen at outset (here named "range approach" for convenience). Hence, any initial gain or loss recognized at outset requires positive evidence that no lower gain or loss is justifiable based on the statistical evaluation.

Risk weights

The statistical evaluation is based on the claims experience (ideally gained from the existing portfolio which has statistically similar characteristics as the written business). Normally industry, or general public, data about the risk will be needed to support the portfolio data, particularly market information about risk-free interest rates results from external sources. It will normally not be possible to assess market information about the risk averseness of market participants in the case of very specific risks such as individual risks transferred by policyholders to insurers. Risk averseness means that market participants weight profits from the contract with a factor below 1, and losses with a factor above 1, in considering all possible scenarios weighted with their probability. Models like cost of capital approaches that are solvency-oriented might sometimes indicate minimum levels of risk averseness and provide a basis for recognizing initial losses. However, such minimum levels do not justify the recognition of initial gains, since there is no positive proof that the risk averseness of market participants does not exceed the level as indicated by such approaches. Especially in the case of distribution functions of net cash flows, which are not close to the normal distribution, cost of capital approaches do not adequately reflect the risk-weighted profitability of the contract.

Consideration of initial cost and future policyholders' behaviour

The accounting consideration of acquisition costs is a significant issue in insurance accounting. The costs of acquiring special contracts of a homogeneous risk exposure exceed often initial premiums requiring that contracts are not terminated too early to be profitable. The continuation is usually benefited by unilateral continuation rights for policyholders, especially guaranteed insurability. Policyholders accept, in return, significant constraints in the case of premature contract cancellation or termination of premium payment. Policyholders who terminate prematurely contracts disregarded those constraints mainly for reasons specific to individual policyholder rather than market driven reasons. Therefore, in such cases, terminations can be reliably predicted on a pool level using actuarial methods, and exit values of pools regularly consider continuation of contracts to some extent as if they were contractual rights of the insurer. However, those continuations are not an enforceable right of the insurer. Nevertheless, the IASB showed, in its meetings since December 2005, some sympathy for recognizing those continuations to some extent, e.g., needed to cover initial cost,

even by recognition of an initial insurance asset. Initial cost spent exceeding premiums might indicate that there is a recognizable value at outset from future non-enforceable continuation.

As a consequence, a part of the initially expected overall profits from the contract will emerge during the lifetime of the contract as the insurer is released from risk (risk weights) and another part from each periodical gain after continuation, as the insurer is released from "continuation risk". That split requires some judgment.

Gains from future continuation should only be anticipated to the extent that:

- the continuation is contractually agreed with all terms and conditions but granting a unilateral termination right,
- the considered initial costs are directly related to, and vary with, new business,
- the costs are demonstrably recoverable by future earnings, considering some continuation earnings, not more than currently expected,
- considered future continuations are significantly protected against market by effective contractual constraints in executing termination rights (such as guaranteed insurability or significantly reduced surrender values compared with the retrospective value of premiums paid), and
- the insurer is able to mitigate the individual behaviour in a pool of contracts subject to the same continuation risk.

In order to reflect the actual continuation risk inherent in the measurement of the fair value, it would be necessary to disclose both the minimum deposit floor and the negative difference, if any, to the fair value. The latter amount is subject to continuation risk under the specific contract terms.

That approach will result, in the case of typical profitable insurance contracts, in an initial measurement equal to initial premium less initial cost (recognized as an insurance asset if negative). In cases of contracts which are very close to traded financial instruments, the range of reasonable estimations will be so narrow that positive evidence of initial gains or losses might be possible in some cases. Hence, the approach makes use of all available knowledge without pretending more. Any recognized initial gain or loss is actually based on robust experience. Such an approach is preferable in comparison with current approaches, either prohibiting any recognition of initial gains or allowing the recognition of initial gains by applying arbitrarily chosen measurement parameters.

Subsequent recognition and measurement

Unit of account

In subsequent recognition and measurement, the insurer is in a different situation compared to that existing at outset. At outset, the insurer had the ability to assess the individual risk position of a contract and to charge a price adequately reflecting the specific nature of the individual insurance risk accepted. After outset, the contract becomes an integral statistical part of the insurance pool and the insurer no longer has any specific knowledge about the individual risk. It is no longer possible to transfer

individual risks, since there is no longer any individual risk assessment contractually demandable. All transfers of pools are based on the past experience of the pool. Hence, the unit of account for recognition and measurement is the pool of contracts. That pool is determined based on the statistical approach of the insurer, monitoring that part of the business separately reflecting common statistical characteristics of all contracts covered. Without such a separate experience record, no group of contracts can be transferred.[9]

Only during the settlement process of claims incurred does the insurer gain progressively more knowledge about the individual contract position. Ultimately, an individual compensation is evaluated as being due for payment. Hence, an insurance contract is only an individual item at outset and at ultimate settlement – at all other times it is only a statistical item within a pool.

The unit of account mainly has consequences for determining the risk weights, considering that the deviation risk is reduced for larger pools of similar and independent risks.[10] It is key to identify, at each stage of contract settlement, the pool to which the contract belongs based on its current stage of settlement.

Reflection of statistical vagueness

Subsequent recognition and measurement should be based on the "range approach" consistent with the approach used at outset. The basis is, at any reporting date, the consideration of the range of reasonable outcomes for the total value, which can be justified using the most recent information. There should be no recognition of gains or losses from changes in measurement parameters without positive evidence.[11] If any lower gain or loss has the same justification, measurement parameters are to be chosen accordingly. That is also true for observable partial measurement parameters. If observed risk-free market interest rates change, but the effect is within the range of the statistical vagueness of other measurement parameters, there is not actually a change in the fair value justifiable. That also applies in cases where, for technical reasons, the model value is determined by separately estimating the mean value of cash flows without risk weights and the risk margin. Changes in estimation of those artificially separated parts do not justify the recognition of gains or losses, if they are within the range of the entire statistical vagueness of both parts together. An artificial focus on accuracy derived only for a part of measurement parameters does not improve the overall accuracy and the robustness of the measurement.

In contrast to a lock-in approach, measurement parameters are reviewed at each reporting date based on the most recent information. If the total outcome applying prior measurement parameters is still justified by that statistical evaluation, no gain or loss should be recognized from changed circumstances. Nevertheless, the pattern of risk weights is adjusted causing the liability to follow over time the development in the provable extent.

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[9] FASB (2005) proposes to determine the unit of account based on such a consideration.

[10] IASC, DSOP Chapter 5, Principle 5.5, http://www.iasb.org/uploaded_files/documents/16_18_dsop_05.pdf

[11] This is in line with the accounting for financial instruments, IAS 39.AG 76A.

That needs to be distinguished from a corridor approach.[12] Under this approach, no gain or loss is recognized as long as the prior value is within a fixed corridor determined around a chosen current estimate. The entire aggregated difference to the chosen current estimate is recognized when falling outside the corridor, causing a significant discontinuance in accounts. In contrast, the proposed range approach ensures that any amount reported is justifiable based on all currently available knowledge. However, the amount is chosen within the range of equally justifiable amounts minimizing the income effect in comparison with the prior estimation, considering all measurement parameters together. This "gliding" range avoids a discontinuance of accounts except for that which reflects the observed data in their entirety.

Consequently, in most cases, losses will arise in subsequent measurement only if the contract is overall, considering all statistical vagueness, deficient after providing for adequate risk weights. The volatility of one single measurement parameter will not automatically cause losses. In addition, gains, except those reflecting released market value margins for risk born in the reporting period, will occur only if actually justified from an overall viewpoint reflecting the expected profitability of the entire contract.

Mismatch issue

The requirement to consider all measurement parameters together, should be rebuttable. If the insurer manages, at least on a pool level, an identifiable part of the contractual risks separately and the measurement parameters of that part are actually observable in markets (e.g., by a replicating portfolio), changes of those parameters could be considered directly without taking into account the vagueness of other parameters.[13] An obvious example of this is a unit-linked contract or other investment-focused contracts. However, that is not restricted to life insurance. In some cases, large pools of claims liabilities might be risk mitigated to such an extent that an asset-liability matching strategy is possible on a pool basis. In that case, the interest risk might be separable and therefore changing the discount rate might affect the total outcome directly disregarding any vagueness present in other measurement parameters. As a result, any matching strategy can be reflected by eliminating measurement differences between the assets, which can be measured at fair value in that case,[14] and the insurance liability. It should also be permissible to introduce such a separation at a later stage of a contract, if reduced vagueness of estimations allows a matching strategy. That also requires the possibility to reclassify related assets.[15] However, the precondition for any separation should be similar to that for using the fair value option,[16] that is, it needs to reflect the actual matching strategy of the reporting entity for the cash flows to be measured.

[12] IAS 19.95.
[13] For an example of such a split, compare Ruygt (2006).
[14] IAS 39.9.
[15] IFRS 4.45.
[16] Amendment to IAS 39, June 2005.

In other cases, the insurer might have within the insurance contract a diversification strategy between interest risk, insurance risk and operational risk – if so, none of the measurement parameters should be considered separately under the range approach. There are often, for example, participation features that cover the entire surplus from the contracts and the investment policy is expected to be structured so as to maximize the long-term performance with a high reliability, without attempting a matching of cash flows of liabilities and assets. In such cases, a separate consideration of individual parameters is not possible.

Consideration of future policyholders' behaviour

Changes of measurement parameters will often have their main effect in the future, assuming renewal of the contract (which is anticipated in some prospective approaches). In all cases where the continuation of the contract depends on the unilateral renewal decision of the policyholder, such effects cannot be anticipated, if they result in a premature recognition of a gain dependant on contract continuation. If, for example, risk-free market interest rates increase, the resulting gain from a reduction of present values of future cash flows arises mainly from discounting cash flows in the far distant future subject to policyholders' continuation decision. Such a gain must not be recognized, since that would mean anticipating profits from future decisions in excess of amounts anticipated to cover initial cost. Future renewal premiums considered in determining the liability have to be reduced adequately (compensating the reducing effect of the increased discount rate). On the other hand, losses as indicated by changes of measurement parameters, arising from future renewals, are recognized except those covered by related future premiums, including renewal premiums not recognized before.

As a consequence, the leveraging effect of long duration contracts, causing volatility in a pure prospective approach, is eliminated to a great extent.

Consequences of approach

The measurement is prospective in principle. The parameters are reviewed in each period (i.e., they are not locked-in). There is just a requirement to choose new measurement parameters within the range of currently justifiable parameters minimizing the income statement effect in the current period in comparison with most recent prior measurement parameters. That eliminates any artificial volatility, which is not justified by actual knowledge, while the future profit pattern always develops as close as possible to the most recent observations.

As acquisition cost was not explicitly deferred, no explicit and potentially artificial amortization of a deferred amount is needed. Instead, it is permitted to recognize future renewal earnings up to the extent indicated by initial cost spent. The coverage of initial cost is implicitly contained in the measurement parameters as used at the prior reporting date. As they determine whether gains or losses might be recognized in the next accounting period, an adequate and systematic release of that implicit "deferral" is achieved.

Liability after coverage period

The claims liability is the liability for future payments as consequence of past insurance coverage (that is, insured events already occurred) both already reported and not yet reported (IBNR) claims. Claims liabilities reflect settlement risks, that is, the uncertainty caused by insufficient knowledge about the consequences under the insurance contract of insured events already occurred. Immediately after an incremental period of insurance coverage, there is no knowledge about individual benefits caused in that period. Initially, the knowledge about such benefits is just a statistical knowledge identical to that at the beginning of the incremental coverage period. The settlement period is the time from the gaining of the individual knowledge up to the recognition of an individual liability due to be paid to an identified beneficiary. The claims liability reflects a separate claim of the policyholder against the insurer, independent from potentially ongoing coverage under the insurance contract. That independent nature justifies a separate recognition and measurement.

Therefore, in each incremental period of coverage, the part of the premium charged for that coverage is revenue, but a liability should be recognized in the same amount (reflecting the obligation which remains uncertain). The risk weight included in that premium (and consequently in that liability) should be released as the insurer is released from the settlement risk and as uncertainty about the actual consequences from coverage provided disappears. That applies as well to unwind of discount.

The disappearing uncertainty requires that the value of the liability is regularly adjusted according to the most recent knowledge about the outcome. Cases with improved individual knowledge (e.g., based on reported claims), are reported as individual liabilities; the remaining part of the entire liability is reported as IBNR. Since the uncertainty is also, for some time, a statistical uncertainty, claims liabilities in their different stages of settlement form homogenous pools, which become smaller and smaller during the settlement process, but the number of pools increases. At the very end, there are only individual amounts due. As long as those pools have sizes, which allow an effective risk mitigation in the pool, they are treated like insurance pools, that is. the unit of account is the pool. With growing individual knowledge and consequently decreasing size of the groups of claims with comparable uncertainty, the mitigation effect disappears. Hence, the unit of account is no longer the pool but each individual claim with the character of a normal individual contingent liability.

In practical terms, at the end of each incremental coverage period, the ultimate claim costs resulting from that period for each pool of contracts are estimated. For that estimation, an approach based on the current state of the art should be applied. According to the estimated timing of payments, those benefits are discounted. Risk weights are applied to the payments, reflecting any available knowledge with positive evidence. Within the range of statistical vagueness, the risk weight chosen is that which minimizes the impact to the income statement in comparison with the premium released for that period. As that premium was based on the most recent knowledge, no significant additional knowledge will normally be gained during the incremental period. After that initial recognition and measurement of the claims liability, the subsequent recognition and measurement follows the range approach, that is, requiring positive evidence for any recognition of gains or losses and choosing

measurement parameters based on the prior measurement, if within the range of statistical vagueness. That results in a robust realization of risk weights and gains or losses from the business during settlement.

Index-linkage, performance-linkage and discretionary payments

The purpose of regulating the relationship between two parties by a contract is to clarify the rights and obligations (excluding future discretion). Hence, most insurance contracts provide clear terms and conditions in determining premiums and benefits. Although there is often some discretion in the case of claims settlement, especially regarding timing, that is actually not of economic relevance, except that there is some flexibility regarding liquidity. However, it is a peculiarity of insurance business that from policyholders' point of view cash flows are uncertain regarding amount or timing, to a significant extent, while that uncertainty is mitigated from the insurer's viewpoint significantly in the pool. Normally, the uncertainty depends on occurrence, timing and effect of the insured event, which is referred to as insurance risk. In some cases, the amount of benefits is not actually expressed in a currency reflecting occurred damage – but in other units of value (like insurance in kind, where the compensation occurs actually by replacing the insured good).

The uncertainty inherent in insurance contracts needs to be distinguished from cases where the benefit is not triggered only by the insured event but, in addition, by another trigger not subject to insured interest. Such uncertainties can be broadly classified as "index-linkage", "performance-linkage" and "discretionary". Performance-linkage and discretionary features do not create a risk for the insurer, while the amount is uncertain from policyholders' viewpoint. As a result of such asymmetry, they need special attention.

Index-linkage

Index-linkage is a linkage of the amount payable to an external economic index other than the insured damage itself. The most common is linkage to units of an external investment fund, but, in addition, linkages to stock indices or to currencies other than the functional currency of the contract are possible. In most cases, especially in cases of unit-linked contracts, policyholders' premiums are sufficient to acquire the entire underlying asset at outset, which forms the basis of future benefits.

Such uncertainties can result in market risks for the insurer. Market risks are, in the case of unit-linked contracts, easily matchable by actually acquiring the linked units with policyholders' premiums. A conceptual approach would require that such a perfect matching is considered by measuring both sides, that is, the liabilities and the related assets, consistently at fair value, as is done in existing accounting approaches for unit-linked business.

Performance-linkage

Performance-linkage means the direct contractual reference of the benefits under an obligation to the performance of one of the parties (the linked party). The

performance-linked benefit offsets, at least partially, gains or losses of the linked party. Such a feature transfers a significant part of the risk inherent in the linked cash flows to the counterparty. Normally, performance-linkage is found only in modified forms, since pure performance-linkage means simply transferring the entire business risk to another party (as in the case of a few mutual companies). Common forms of performance-linkage are income tax, ownership rights (minority interest and mutual companies) and, in insurance business, some forms of participating business and premium adjustment clauses. In insurance business, the linked performance is that of the pool of those performance-linked contracts themselves. Hence, a part of the risks arising from a group of contracts is re-transferred to that community. Participating business combines a minimum guarantee and, in addition, performance-linked benefits. It is obvious that the recognition and measurement of performance-linkage on the side of the linked party should follow the recognition and measurement of the linked cash flows. The most robust approach for traditional participating contracts, where the participation right is a direct linkage to the performance of the insurer, is a separate consideration of the guarantee and the performance-linked part. The guaranteed part is measured, ignoring the performance-linked part. The performance-linked obligation is determined based on the resulting gains or losses in the IFRS report, reflecting policyholders' share on that basis.

Discretion

Future discretion is normally a non-issue in accounting, since it does not reflect a present obligation. Actual discretion is rare in normal business, since the main purpose of contracts is to provide clear terms and conditions to avoid discretion as far as possible. However, the development in some jurisdictions allows long duration insurance contracts to grant some discretion to the insurer to cater for the specific uncertainty inherent in those contracts while, in other jurisdictions, insurance contracts are legally free of discretion. The discretion granted is often constrained by contract terms or law. There are many further constraints of less clear, but more flexible, character. That raises the accounting issue of whether those constraints can be recognized as present obligations. If the constraints are of legal nature the result is obvious.

It is very important to distinguish between the accounting term ''constructive obligation'',[17] which is a very restrictive concept, and the usual term ''reasonable policyholders' expectations'' often used to justify ''discretionary'' payments. In some cases, such ''expectations'' might create a constructive obligation, but in many cases the pressure of that ''expectation'' is not sufficient to comply with the definition of a constructive obligation.

Discretion is executed mostly under economic considerations, especially competition. Competition affects both the persistency of existing contracts and the attractiveness for potential new customers. Such considerations can hardly be understood as causing a present obligation. However, future earnings, especially

[17] IAS 37.10, especially the proposed strengthening in Draft Amendment, June 2005

interest margins, subject to a renewal decision of policyholders, cannot be anticipated under the approach described above. Therefore, there is no need to consider whether parts of those earnings will, in the future, be returned to policyholders, based on a discretionary decision of the insurer, for example, to improve persistency. Overall, the non-recognition of future renewals also addresses that issue. It is important, in the case of consideration of future renewal premiums covering initial cost, to ensure that assumptions about future renewal, which are correlated with future discretionary payments, are chosen in a manner consistent with the actually available net earnings after such discretionary payments.

Some insurers feel subject to ethical constraints in executing discretion, especially mutual insurers or other insurers in a fiduciary position (e.g., in demutualized business). Here, special judgment is needed in evaluating whether such ethical constraints might be considered as a special form of constructive obligations.

In some cases insurers voluntarily grant benefits to policyholders for competitive reasons, without any contractual reference to those benefits. Typically, they are paid on top of strictly regulated performance-linked benefits. Such future payments, although often reasonably expected, do not form a present obligation in the absence of a constructive obligation and are therefore not recognized in advance.

Identified present obligations resulting from constraints of discretion are considered in the same way as any other obligation of similar character. Such constraints might result in the benefits being similar to guaranteed, index-linked or performance-linked benefits.

Conclusion

Although the IASB started with a blank sheet of paper, there remains a strong tendency towards a fair value accounting. The specific accounting requirements bring up again elements which are well known from existing accounting approaches, perhaps with a different reasoning than before. Elements such as prospective approaches anticipating future earnings, covering initial cost rather than deferral approaches, recognition of profit margins whenever renewal premiums are received (equivalent to a net premium approach), or unlocking of assumptions restricted to revised future earning patterns (prospective unlocking) rather than immediate recognition of aggregated future impact are not new. There is sufficient experience with such approaches. Most important is that they are not based on blind rules but are flexibly applied as a response to lacking knowledge, while any positively evidenced knowledge is actually considered. Under such circumstances a fair value accounting for insurance contracts is consistent with the guidance and requirements in IFRSs dealing with similar and related issues. The proposed approach complies with the qualitative characteristics of relevance and reliability.

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