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Accounting for "Insurance Contracts" According to IASB Exposure Draft — Is the Information Useful?

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The International Accounting Standards Board (IASB, former IASC) has been working on a new international standard for insurance contracts based on fair value for about 10 years now. However, details on how to measure such a value in practice were unclear for a long time. A first indication of how an accounting model for insurance liabilities could look like was given by the Discussion Paper from May 2007 and concretised with the publication of the IASB Exposure Draft "Insurance Contracts". This paper aims to analyse the extent to which the accounting model for insurance liabilities introduced in the Exposure Draft is qualified to generate useful information to users of financial statements. Furthermore, we give recommendations about which fields need further adjustments in order to comply with decision usefulness as the overriding principle.
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Introduction

The International Accounting Standards Board (IASB, former IASC) is currently developing an international accounting standard for insurance liabilities. The work on this project was started more than 10 years ago and a first milestone was reached in 2004 by publishing International Financial Reporting Standards 4 (IFRS) as an interim standard for insurance contracts. The final standard will be the result of the so-called phase II of the project "Insurance Contracts" and shall replace the current IFRS 4. Phase II started with the publication of a Discussion Paper in May 2007 and described a valuation of insurance contracts with a so-called Current Exit Value. After facing severe criticism from science and also from practice — particularly regarding the reliability of such a hypothetical value — the IASB radically turned away from this approach and dismisses the perspective of a hypothetical buyer of the contracts to be valued. The Exposure Draft "Insurance Contracts" published in July 2010 favours an accounting model that allows the use of the reporting company's own expectations when estimating the value of the cash flows resulting from the respective contracts. An overview of the measurement approaches discussed in the past is given in Table 1.

Hence, the accounting model described within the Discussion Paper was to be adjusted in many details even if the general approach remains the same: the value of

Table 1 Measurement approaches for phase II of the project "Insurance contracts"

	Issues paper 1999	*DSOP 2001*	*IFRS 4 (BC 6–9) 2004*	*CFO-Forum elaborated principles 2006*	*Discussion paper 2007*	*Exposure Draft ED/2010/8*
Measurement	Fair Value (Exit Value)	Fair Value (Entry Value) or preference: in the absence of market-based information Entity Specific Value	Fair Value (Entry Value) or: in the absence of market based information Entity Specific Value	Best estimate based on management's expectations, taking into account the uncertainty of future cash flows	Fair Value (Current Exit Value)	Fair Value based on fulfilment cash flows
Revenue recognition	Report full profit at inception of the contract	Depending on management expectations → usually no profit at inception of the contract	No profit at inception of the contract	No profit at inception of the contract	Recognition of profit in the income statement possible at inception of treaty	No profit at inception of the contract
Risk adjustment	Only non-diversifiable risks	Both diversifiable risks and non-diversifiable risks	Fair Value not less than the amount the company would ask from the insured to sign an appropriate contract	Consistent with the risk management of the company	Neutral estimate of a margin that the market participant would ask for bearing the risk	Maximum amount the insurer would pay in order to be released from the risk of contributing actually higher than the estimated loss payments
Credit characteristics	Taken into consideration	No consideration in case of Entity Specific Value Consideration in case of Fair Value questionable due to practical problems	Taken into consideration	Not taken into consideration	Disclosure of the solvency influence at inception as well as in the subsequent measurement (impact expected to be weak)	Not taken into account

insurance liabilities will be estimated based on the same three building blocks already known from the Discussion Paper. However, the changes that had to be made will have significant impacts, both on the process how to calculate the value of the liability and also on the results. Such changes concern, for example, the calculation (resp. the calibration) of the risk margin, profits at inception or the consideration of the credit characteristics of insurance liabilities.

The purpose of this paper is to critically analyse the rules presented in the Exposure Draft "Insurance Contracts" and to discuss recommendations *for* and *against* other possible approaches. Therefore, an examination of the proposed alternatives to the criterion of *decision usefulness*, as well as its sub-criteria *relevance* and *reliability*, is essential.

In addition, we would like to assess the feasibility of implementing the new rules and possible problems that the insurance industry will face when adjusting the respective processes and systems.

Purpose of a new international accounting standard for the insurance business

Decision-usefulness

For the assessment of an accounting standard, it is important to know the intended purpose of the new rules. The IASB clearly defines the ultimate objective for the development of new accounting standards in its *Conceptual Framework for Financial Reporting*: providing information that is useful to the economic decisions taken by users of financial statements. Such decisions are mainly related to investments and disinvestments and to the assessment of the management of the reporting company, and hence the information given by the statement should enable its readers to forecast the amount and timing of future cash flows.[1] This very superficial description of the goal of international financial reporting is concretised by the IASB defining two qualitative criteria that financial information has to fulfil: on the one hand, information has to be *relevant* and on the other it has to be presented faithfully, that is, it has to be *reliable*.[2]

(a) *Relevance*: Information is relevant to users of financial statements if it can help to forecast future cash flows or revise former expectations of investors. Considering that empirical studies have shown that the increase of a firm's market value is strongly correlated with its revenue from ordinary activities,[3] financial information is relevant if it allows analysing the structure and the sustainability of the current cash flows.

In the past, research has been done to determine the relevance of different measurement approaches for accounting purposes. What these studies have in common is that they try to measure the impact of accounting information on the value of the reporting company.[4] *Streim, Bieker and Esser*, for instance, found

[1] See IASB Conceptual Framework.QB2-QB3.
[2] See IASB Conceptual Framework.QC4.
[3] See for example Tsuji (2006), pp. 1211–1214 or Biddle *et al.* (1997), pp. 301–336.
[4] See Hellström (2006), pp. 325–326.

out that Fair Values generally have greater value relevance than historical cost.[5] However, such studies are often criticised due to the fact that they always determine the incremental value relevance of a further measurement model (in this case a Fair Value). It is not clear what the results would be if financial statement users would only know one of the alternatives.[6] Furthermore, such studies have not shown consistent results in the past.[7]

Our analyses will therefore focus on the qualitative impact that we expect the new accounting rules for insurance contracts will have on the relevance of information of a financial statement based on IFRS.

(b) *Reliability*: The qualitative criterion of reliability demands all accounting data to be based on an economic phenomenon in the real world, that is, information has to be complete, neutral and free from error.[8] The reason for the importance of reliable accounting information can be deducted from the principal–agent relationship that the management and the shareholders of an insurance company have: accounting data has to be reliable in order to prevent management from covering opportunistic behaviour.[9] Management could, for example, cover opportunistic behaviour by doing earnings management to achieve a high annual result that enhances the management's compensation. Habib[10] has found out that earnings management significantly reduces the value of accounting information.

In this paper, we will mainly analyse the extent to which the rules described in the Exposure Draft "Insurance Contracts" allow management to impact the result of the insurance contract valuation in a desired manner without manipulating the financial statement in a way that would violate any of the instructions.

Of course, a company cannot and should not include all information that is relevant and reliable in its financial statement. There is always an assessment of the cost-benefit ratio necessary, which should include not only direct costs that arise when gathering and preparing the accounting data, but also costs for analysing the information by investors.

Scope of the IASB Exposure Draft "Insurance Contracts"

The scope of the final IFRS for insurance contracts will be limited to insurance contracts (including reinsurance contracts) that the company issues and reinsurance contracts that it takes. Thus, accounting for a direct insurance asset is explicitly not in the scope of a final standard. Furthermore, the accounting treatment of financial instruments with discretionary participation features is still supposed to be regulated

[5] See Streim *et al.* (2003), p. 457 et seq.
[6] See Wagenhofer (2008), p. 189.
[7] See Devalle *et al.* (2010), pp. 93–96.
[8] See Lorson and Gattung (2007), p. 659 and IASB Conceptual Framework.QC12 et seq.
[9] See Molinari and Nguyen (2009), pp. 292–293.
[10] See Habib (2004), pp. 1–12.

by a final standard for insurance contracts.[11] Basically, this corresponds to the scope of IFRS 4 that is currently applied to the accounting of insurance contracts[12] and the IASB continues to prefer a product-related and not an institutional-related approach. Thus, an insurer has to account all assets and liabilities that do not meet the definition of an insurance contract or a product with discretionary participation features according to the other relevant IAS/IASB.[13] The only modification with respect to the current standard is the cancellation of accounting options regarding financial guarantees,[14] which will compulsorily be treated as insurance contracts in future.[15] Furthermore, all options regarding unbundling of deposit components, embedded derivatives and service components will no more be available under a final standard for insurance contracts.[16]

The definition of an insurance contract has also been adopted from IFRS 4 and remains unchanged. The existence of an insurance contract is still defined through the following three points:

- The policyholder receives compensation from the insurer if a specified uncertain future event adversely affects the policyholder.
- An insurance risk will be transferred from the insured to the insurer.
- The transferred insurance risk is significant.

On the other hand, the definition of discretionary participation features is more restricted in the Exposure Draft than in IFRS 4: investment contracts are only regarded as having a discretionary participation feature if there are also existing corresponding insurance contracts that provide similar contractual rights to participate in the performance of the same insurance contracts, the same pool of assets or the profit or loss of the same company, fund or other entity.[17] Financial instruments with profit participation that do not fulfil these conditions are accounted according to the appropriate standards valid for financial instruments. The IASB differs consciously from the accounting practice according to U.S. GAAP, as investment contracts with discretionary participation features have to be accounted in the same way as financial instruments according to U.S. GAAP. A separate handling of these insurance contracts that are similar to financial instruments in many aspects would be complex, inconsistent and not comprehensible for the users of financial statements.[18]

As shown above, the scope of the Exposure Draft goes beyond pure insurance contracts like it does in IFRS 4. However, this paper will focus on the valuation model for insurance contracts. The specific rules for reinsurance contracts, financial instruments with discretionary participation features, insurance contracts acquired in a portfolio transfer and unbundling will not be further analysed and assessed.

[11] See ED/2010/8.1.
[12] See IFRS 4.2.
[13] See ED/2010/8.3.
[14] See IFRS 4.4(d).
[15] See ED/2010/8.BC193-BC195.
[16] See ED/2010/8.8-12.
[17] See ED/2010/8.Appendix A.
[18] See ED/2010/8.BC198-199.

Methods for accounting and valuation

There is no liquid market for portfolios of insurance contracts, which would allow us to observe fair prices and derive values for the portfolios that are to be measured. Therefore, a fair value for insurance liabilities has to be determined synthetically. The proposal from the IASB for this matter is to value the liabilities based on *fulfilment cash flows*[19] adjusted for the time value of money[20] and for the risk that the actual claim payments are higher than their expected value. Initially, an insurer shall measure the insurance contract at the risk adjusted expected present value of the future cash outflows less future cash inflows that will arise due to the fulfilment of the insurance contract by the insurer. If this amount is negative, a residual margin that eliminates any gain at inception has to be added. In this case, the value of the liability at inception will be zero.[21] If the amount is positive, the insurance company will have to recognise this amount immediately as a loss.[22]

Estimation of expected cash flows

The Exposure Draft specifies that the cash flows resulting from an insurance contract have to be determined by estimations. For these estimations, the following shall hold:[23]

- The estimations are explicit (i.e. separate from estimates of discount rates that adjust those cash flows for the time value of money and the risk adjustment that adjusts those cash flows for the effects of uncertainty about the amount and timing of those future cash flows).
- Reflect the perspective of the entity but, for market variables, be consistent with observable market prices.
- The estimations incorporate — in an unbiased way — all available information about the amount, timing and uncertainty of all cash flows that will arise as the insurer fulfils the insurance contract.
- The estimations are current (i.e. the estimates shall reflect all available information at the measurement date).
- The estimations include only cash flows from existing contracts.

The IASB does not give any instructions with regard to the methods that can be used for estimations, but only depicts the approach of estimating an expected value in a conceptual way. Furthermore, the IASB allows for models of different degrees of detail taking into consideration the specific availability of data and the cost-benefit ratio.[24] The unspecific wording of the IASB when describing this part of the measurement approach for insurance contracts makes it possible to apply various

[19] See ED/2010/8.BC49.
[20] The discounting is necessary to account for the time value of the cash flows.
[21] See ED/2010/8.17-22.
[22] See ED/2010/8.18.
[23] See ED/2010/8.23.
[24] See ED/2010/8.B38-B39.

models of different quality, which might lead to considerable differences in the quality of the financial information. Furthermore, a lack of comparability of financial statements between different insurance companies is likely to arise.

In order to keep the estimations up to date, the used variables have to be checked regularly for accuracy at the reporting date. In case of changes of particular parameters, these differences will have to be justified. This is especially the case for parameters where the usage of a certain range of values is justifiable. If the actual conditions have not changed at the end of the reporting period, it is not possible to change the parameter from one end to the other end of the range.[25] Such a rule enhances the reliability of financial statements as it considerably decreases possibilities for earnings management.

In order to clarify which cash flows have to be considered when estimating the fair value, the IASB follows an approach similar to the concept of "guaranteed insurability" known from the Discussion Paper.[26] According to this concept, only cash flows that the policyholder may legally claim from the insurer or which are within the boundary of the contract shall be taken into account for calculating the insurance liabilities. The boundary of an insurance contract distinguishes the future cash flows that relate to the existing insurance contract from those that relate to future insurance contracts. The boundary of an insurance contract is the point at which an insurer either:

- is no longer required to provide coverage, or
- has the right or the practical ability to reassess the risk of the particular policyholder and, as a result, can set a price that fully reflects that risk. In assessing whether it can set a price that fully reflects the risk, an insurer shall ignore restrictions that have no commercial substance (i.e. no discernible effect on the economics of the contract).[27]

All cash flows allocable to an insurance contract according to this definition that depend on the *behaviour of the policyholder* are weighted with the respective realistically estimated probability for the particular behaviour. It does not play any role if this behaviour is of advantage or disadvantage for the insurance company,[28] but there will be an adjustment for the risk that the actual behaviour differs from the expected behaviour of the policyholder.[29] This rule is intended to allow for the modelling of surrender or conversion options. The particular design of such an option should not influence the accounting of these contracts. For example, a contract with a lifelong contract period and an option for both parties to cancel the contract at the end of each year must be accounted in the same way as a contract with a coverage period of 1 year.[30]

[25] See ED/2010/8.B54.
[26] See DP.150-160 and ED/2010/.BC60.
[27] See ED/2010/8.26-27.
[28] In contrast, the Discussion Paper assumed that options in the contract would be exercised to the disadvantage of the insurance company by all policyholders. See DP.122 and ED/2010/8.BC60-BC63.
[29] See ED/2010/8.28.
[30] See DP.152.

Thus, in contrast to the Discussion Paper, the IASB has abandoned the assumption that all policyholders choose the option that is disadvantageous to the insurance company. This leads to a more realistic depiction of the economic reality, but nevertheless does not take into account a complete picture of the value of the customer relationship, because the rule is limited to facts that belong to the contract according to the above-described boundaries of the contract. Insurance companies that offer casualty coverage for a period of 1 year for instance also benefit from an existing customer relationship.[31] This fact would not be taken into account according to the current model described by the Exposure Draft. Accordingly, the IASB should either decide to take into account policyholder behaviour in general when estimating future cash flows or stick to the assumption that in case of uncertainty the liabilities will be estimated in a pessimistic manner. The trade-off between these two options very clearly reflects the two sub-goals of the IASB — relevance and reliability — and their competing nature: while the first option would always allow to include the most relevant information available into the annual report, this information would possibly show a lack of reliability, as probabilities of future policyholder behaviour is itself always associated with uncertainty. For the second option, it would be the reverse: the receiver of the financial statement would have no relevant information on how the future cash flows will develop as the estimation just leaves out a relevant aspect. Of course, the information generated by the second option would be much more reliable as one mechanism to include subjectiveness in the estimate of the liability would be excluded. However, the way the IASB follows with its approach is neither consistent within the accounting model itself nor is it consistent with the IASB accounting framework in general: according to IAS 38.63, an internally generated intangible asset must not be recognised.

From our point of view, including the whole amount of estimated future cash flows would better fit the whole accounting model and the direction that the IASB follows with its "Fair Value View" as described by Whittington.[32] Certainly, this would make necessary major adjustments of other IASB standards (e.g. above mentioned IAS 38.63) to keep the whole accounting framework consistent.

Finally, the fact that only a part of the customer relationship is recognised under the discussed accounting model in combination with recognition of acquisition costs as an expense when incurred could lead to the disclosure of a loss at initial recognition of a contract even if this particular contract is profitable from an overall perspective.[33] In addition to incorrect information for stakeholders, this also causes misleading incentives for the management of an insurance company.[34] Reporting a loss although the company has closed contracts that will be profitable does certainly contradict the overriding principle of decision usefulness.

Furthermore, insurance companies will face major investments to adjust their current processes of estimating future cash flows according to the new rules. Indeed,

[31] See Molinari and Nguyen (2009), p. 302.
[32] See Whittington (2008), pp. 139–141.
[33] See European Insurance CFO Forum, CEA (2007), p. 5.
[34] See Molinari and Nguyen (2009), p. 303.

insurance companies have already installed processes that allow for value-based management. However, such models always aim at incorporating a complete picture of the economic reality and do certainly not consider, for example, artificially defined boundaries of a contract.[35] Costs related to such process adaptions also have to be considered when evaluating the decision usefulness of accounting rules, as the net benefit of financial information consists of the gross benefit less all efforts arising both on the side of the financial statement users and also on the side of the reporting companies.

Discounting for recognition of the time value of money

In order to reflect the time value of money, cash flows have to be discounted by using a market-consistent interest rate of financial instruments with cash flows that equal those of the insurance contracts in terms of timing, currency and liquidity. In this process, all factors that are not relevant for the insurance contract (e.g. risks that are included in the market price of the respective financial instrument) have to be excluded.[36] In case the cash flows resulting from the insurance contract depend on the performance of a particular asset, the interest rate used for discounting has to be adjusted accordingly.[37] In addition, an adjustment for consideration of inflation of cash flows that are based on nominal values is necessary.[38]

Whereas adjustments for inflation and differing risk profiles still seem to be possible without any difficulties, the adjustment of the discount rate for the usual lack of liquidity[39] given in the context of insurance contracts will be much more complicated as it is difficult to determine a reliable price for the fact that a financial instrument is traded on an almost illiquid market. An insurance company could take advantage of this fact and apply an adjustment for liquidity that steers the annual profit in a direction favourable for the management of the reporting entity or the company itself. The IASB is aware of these problems and is still investigating possible solutions. However, the final standard will also not contain any kind of "instruction" describing in detail how the discount rate has to be determined.[40]

It is undisputed that already minor differences of the discounting rate may have a huge impact on the result of a valuation based on discounted cash flows. Certain accounting systems therefore stipulate the application of fixed interest rates. This is certainly not feasible considering the IASB's principle-based approach for the development of new IFRS, nor is it desirable with respect to reliable accounting information, as clearly shown by Babbel and Merrill.[41] However, the Board should at least describe a determination model for the interest rate in order to ensure a unique

[35] See Hancock *et al.* (2001) for the reasons and models of value-based management in the insurance industry.
[36] See ED/2010/8.30.
[37] See ED/2010/8.31-32.
[38] See ED/2010/8.33.
[39] See ED/2010/8.34.
[40] See ED/2010/8.BC100-BC104.
[41] See Babbel and Merrill (2005), p. 19.

approach over time and between different companies. This would certainly reduce scope for earnings management and ensure comparability of financial reports, thus enhancing decision usefulness of financial information for investors. Furthermore, a detailed description of the methods suitable for determining the discounting rate would also reduce the probability that the models used by the insurance industry will be rejected by auditors. Thus implementation cost for the new accounting systems would also be more predictable.

Risk adjustment for uncertainty related to estimated cash flows

A further part of the accounting model proposed by the IASB is the risk adjustment in order to reflect the price for bearing the risk related to the fulfilment of insurance contracts. The amount shall be equivalent to the amount that an insurer would pay in order to be relieved of the risk that the ultimate fulfilment cash flows exceed the expected value of these cash flows.[42] That means that all risks that are not directly connected to the insurance service (e.g. investment risks, operational risks) must not be part of this risk adjustment.[43] In contrast to the Discussion Paper from 2007, the IASB has now abandoned the idea of solely using market prices for determining the risk margin.[44] On the one hand, insurers will be enabled to use risk adjustments derived from their internal models also for accounting purposes. On the other hand, lack of market consistency will lead to entity-specific adjustments for risks that will reduce the reliability of information given through the financial statements. Therefore, the board has decided that changes in the risk adjustment from one period to another can only be made if evidence indicates that previous estimates are no longer valid.[45] However, the reporting entity and its management can significantly influence the amount of the risk margin specified at inception as described below.

The IASB clarifies the purpose of the risk adjustment in detail, specifies the attributes of the risk adjustment and limits the methods to determine the risk adjustment to confidence level, conditional tail expectation and cost of capital techniques.[46] However, the Exposure Draft does not give any statement neither on the parameters nor on details of the design of the models (e.g. confidence level, weighted average cost of capital, etc.), although a small change of these parameters might have a significant effect on the risk margin and therefore on the annual results. Ernst & Young showed that already minor changes in the way the margin is calculated will have a major impact on the result of the whole valuation.[47] In our opinion, this open setting regarding the methods for determining the risk margin (only the names and a very superficial overview of the methods are given) leads to a poor limitation of the possibilities for earning management. Research has shown that such possibilities

[42] See ED/2010/8.35.
[43] See ED/2010/8.69.
[44] See Insurance DP.75-76.
[45] See ED/2010/8.48. and Ellenbürger and Kölschbach (2010), p. 1304.
[46] See ED/2010/8.B68-B90.
[47] See for example Ernst & Young (2007).

in general will be utilised by management to steer the annual result in the desired direction.[48]

Another part of the insurance liability measurement is a residual margin that equals the difference of the time- and risk-adjusted expected cash inflows and cash outflows.[49] This topic is closely related to the recognition of gains at inception of the contract, which was discussed controversially in the past. One possibility would be to allow for an initial profit, another would be to distribute the profit of a particular insurance contract across the whole contract period.[50] While the IASB has preferred the former approach in the Discussion Paper, the Exposure Draft stipulates a residual margin which in case that the cash outflows do not exceed the cash inflows (i.e. the contract is profitable at the time of its conclusion) avoids reporting any profit at initial recognition of the contract.[51] This residual margin is then released either on the basis of the passage of time or on the basis of the expected timing of incurred claims and benefits, if that pattern differs significantly from the passage of time.[52]

The following example shall provide an illustration of the approach described by the Exposure Draft showing the respective positions of the balance sheet and the income statement under the following assumptions:[53]

Insurance company A signs a professional indemnity insurance contract (duration 3 years) at the end of accounting year 0. The premium is 240 monetary units. Insurance company B sells the same product, however at a lower premium of 210 monetary units. Both companies expect claim payments of 60 monetary units per contract year. Following the methods for the calculation of the risk margin given in the relevant accounting standard, both companies calculate a risk adjustment of 30 monetary units. The uncertainty on the amount of cash outflows related to the contract declines proportional to the amount of the expected cash outflows.[54] *Hence, both the risk margin and the residual margin are released proportionally to the passage of time.*

Tables 2 and 3 *show how the described policies affect the balance sheet and the income statement of the insurance companies A and B. For the balance sheet, both insurers will have to show an insurance liability, which consists of the expected cash outflows, the risk margin and the residual margin. The income statement will be affected by the expenses for the change of the liability, the expenses for the settlement of claims incurred and the premiums paid by the policyholders.*

An interesting point that is clearly shown by the example above is that the insurance liability is different between company A and company B at any point in time during the contract period, although both liabilities represent the same fact. Investors would expect higher future cash outflows for company A than for company B if they include

[48] See Pellens *et al*. (2008), p. 425 or Anandarajan *et al*. (2007), pp. 357–379.
[49] See ED/2010/8.17(b).
[50] See Insurance DP.78-80.
[51] If the contract is not profitable at initial recognition the difference between the present value of the risk adjusted cash outflows and the premium has to be disclosed as a loss in the income statement at initial recognition.
[52] See ED/2010/8.50.
[53] See Molinari and Nguyen (2009), pp. 296–299.
[54] In order to simplify, the effects of discounting are neglected in this example.

Table 2 Accounting at company A

Date 31 December	*0*	*1*	*2*	*3*
Expected claims payment	180	120	60	0
+ Risk margin	30	20	10	0
+ Residual margin	30	20	10	0
= *Insurance liability*	*240*	*160*	*80*	*0*
−Changes in liability (= expense)	240	−80	−80	−80
−Expense for claims payment	0	60	60	60
+ Premium	240	0	0	0
= *Profit*	*0*	*20*	*20*	*20*

Table 3 Accounting at company B

Date 31 December	*0*	*1*	*2*	*3*
Expected claims payment	180	120	60	0
+ Risk margin	30	20	10	0
+ Residual margin	0	0	0	0
= *Insurance liability*	*210*	*140*	*70*	*0*
−Changes in liability (= expense)	210	−70	−70	−70
−Expense for claims payment	0	60	60	60
+ Premium	210	0	0	0
= *Profit*	*0*	*10*	*10*	*10*

the amount of insurance liabilities in their analysis. However, the reason for the higher amount of provisions at company A is simply the higher residual margin due to the higher premium company A is able to impose on the market. Hence, the amount of the insurance liability could mislead investors if a residual margin that avoids any gain at inception is part of the measurement model. Against this background, we strongly recommend to revise the concept of a residual margin and allow for initial profits in order to fulfil the criterion of relevant and useful accounting data.

Furthermore, the above example shows us that the profit per period varies depending on the premium earned. In the past, it was argued that this is reasonable for the accounting of insurance contracts as the service "providing insurance coverage" usually is delivered over a longer period of time. Therefore, also the profit resulting from the delivery of this service should be distributed across this period.[55] We agree that this approach leads to relevant information, which enables the users of financial statements to assess the earning power of a company.[56]

However, we doubt that the whole profit that arises from the business described above is leading back to the service "providing insurance coverage". It is the risk

[55] See for example Duverne and Le Douit (2007), p. 47.
[56] See for example Molinari and Nguyen (2009), pp. 291–292.

margin that (per definition) reflects the price that the insurance company would pay to be disburdened from the service of "taking over the risk". Reducing the risk margin over the contract duration, the insurance company automatically spreads the profit for this service of the contract across the contract period. The example shows that this part of the profit is independent from the premium. In contrast, the residual margin and its liquidation across time are not directly connected to the insuring service provided by the company. Even the IASB does not assume the residual margin to be a profit margin for the service "insuring", but a compound item for the following factors:[57]

- Compensation for additional services that are not unbundled (and that therefore are not treated as arising from a separate service contract, which would be accounted according to the standards on revenue recognition).
- Compensation for originating contracts and assembling them into the portfolio.
- Compensation for the development of products.
- Additional gains that arise from market power and discounts that the insurer grants in order to assure market power.
- The risk that the insurer might not be able to fulfil its obligations.

It seems that the residual margin partly serves as a substitute for a service margin that should consider expected profits arising from services connected to the insurance contracts (the application of such a service margin was proposed by the IASB in its Discussion Paper). For the first item mentioned above, the distribution of the profit over the contract period is comprehensible, but certainly that does not seem reasonable for gains based, for example, on the successful development of a product.

Similarly, the recognition of profits arising from the market power of the insurance company through a residual margin is to be assessed critically. The market power usually is a result of past expenditures and investments (e.g. advertisement or merger costs). Therefore, profits resulting from such activities should be recognised when they are realised, which is in this case the point in time when a corresponding contract is concluded. The fact that a corresponding gain is realised with the conclusion of a contract is unquestionable as it is clear that the insurer provides evidence that it is able to impose the recognised premium on the market by issuing that specific contract. Furthermore, the application of a residual margin could also have serious impacts on the company's strategy itself as shown in the next section.

Proponents of a residual margin argue that the margin helps to represent the business model of insurance with its long-term nature in financial reporting.[58] Of course, we agree that the business model of an insurance company and its balance effects over time are designed for periods of more than 1 year. However, there are other industries that benefit from balancing effects over time. If we allowed including these effects in an insurance company's financial statement, we would corrupt comparability of financial statements between different industries. We think that it is up to the analysts and investors to include knowledge about balancing effects in their decisions on investment or disinvestment. Strong support for the inclusion of such balancing

[57] See ED/2010/8.BC125.
[58] See European Insurance CFO Forum, CEA (2010), p. 4.

effects in financial reporting[59] might also trace back to the fact that smoothed annual results have a positive impact on the capital cost that insurance companies are able to get on financial markets.

Acquisition costs

The accounting of acquisition costs is closely related to the recognition of earnings. According to the Exposure Draft, acquisition costs are handled differently depending on their origin: all acquisition costs that are not incremental[60] are directly recognised as an expense when incurred, whereas the incremental part of acquisition costs is included in the present value of the fulfilment cash flows and reduces the amount of the residual margin.[61] These costs drop out of the measurement of the insurance liability as soon as they are incurred (which usually will be shortly before or after the conclusion of the respective contract) and are then recognised as an expense in the profit and loss statement. Hence, the recognition of the incremental acquisition costs is outweighed by a reduction of the insurance liability by the same amount and has no influence on the income statement.

This differential approach for incremental and non-incremental acquisition costs is crucial for a faithful presentation of the underlying business transaction. Assume that this differentiation between the two types of acquisition costs is not applied and that the entire amount of the costs of initiating the contract is recognised as an expense when incurred.

- On the one hand, such an approach would lead to a completely distorted picture of the economic reality, as contracts that are profitable would produce a loss in the moment of their first recognition in a company's statement of accounts. Even following the approach proposed by the IASB, the conclusion of a contract might produce a loss in the moment of its first-time recognition, if the company has had a lot of expenses that are not considered as incremental acquisition costs. This could, for example, be the case if a company has spent a large amount of money for a marketing campaign that allows the company to sell a large number of high-priced contracts. As the *residual margin avoids any gain at inception*, those costs could not be recovered, and thus the company would report a loss in the period of inception for possibly highly profitable contracts. Comments on the Exposure Draft therefore see the risk of encouraging outsourcing of activities due to accounting reasons not necessarily on the basis of sound economics.[62] However, outsourcing the respective

[59] Such balancing effects are not limited to the measurement of insurance liabilities. For example Allianz SE clearly states in its comments on the Exposure Draft that it fears to have its assets measured at Fair Value and that this would not reflect the business model of an insurance company (see Allianz (2010) p. 2).

[60] The IASB defines acquisition costs as "direct and indirect costs of selling, underwriting and initiating an insurance contract". Incremental acquisitions costs are "costs of selling, underwriting and initiating an insurance contract that would not have been incurred if the insurer had not issued that particular contract, but no other direct and indirect costs". See ED/2010/8.Appendix A.

[61] See ED/2010/8.39 and ED/2010/8.B35.

[62] See European Insurance CFO Forum, CEA (2010), p. 2.

cost centres would not necessarily help to avoid this problem. We see the risk that if the management is interested in a short-term maximisation of the annual result, it could tend to stop, for example, promotional activities even if those would be favourable for the company in the long run.

- On the other hand, this accounting model can also produce undesirable incentives for the management of the reporting insurer: if the management's goal for the short term is to maximise the company's net earnings, it might not focus on the conclusion of new contracts even if they are profitable in the long run. This phenomenon can be summarised as having a negative influence on the stewardship function of the accounting rules described.

Furthermore, the described approach impairs the reliability characteristics of the accounting information: the differentiation between incremental and non-incremental acquisition costs is not unambiguous because the proposed definition of the term "incremental acquisition costs" is neither very precise nor is it very detailed. Without further specification, the current definition of the term allows for accounting a wide range of costs either in one category or the other as allocation to one of these categories is strongly dependent on the assumed time horizon. If one assumes a very long time horizon, each contract can be seen as producing a small part of all overhead costs that would not have been incurred if that specific contract had not been issued. Moreover, in this aspect, the Solvency II valuation model differs from the IASB model as it also incorporates part of the overhead costs in the measurement of the liability.[63]

Level of aggregation

The definition of the unit of account has no impact on the present value of the cash flows but it substantially influences the amount of the risk adjustment. Diversification effects within a portfolio reduce the risk of the cash flows exceeding their expected value through random fluctuations. Such effects in general are more intense the greater the considered portfolio is. Therefore, they have to be included when calculating the value of the liability.[64]

For the final accounting standard "Insurance Contracts", the IASB proposes the calculation of the risk margin based on portfolio level.[65] A portfolio of insurance contracts is defined as a group of contracts "that are subject to similar risks and managed together as a single pool".[17] This means that all risk-reducing effects arising from diversification between contracts of the portfolio that the valuated contract is part of are to be considered when calculating the margin for this specific contract. All other effects that result from diversification effects between risks that are managed in different portfolios do not influence the amount of the risk margin.

The definition of the portfolios relevant for calculating the risk margin will bring an entity-specific component into the measurement of the whole contract. Obviously,

[63] See CEIOPS (2010), p. 6.
[64] See Farny (2006), pp. 86–87.
[65] See ED/2010/8.36.

the size of the portfolio relevant for measuring the risk margin is strongly related to the specific criteria of an insurer to put together its contracts in a portfolio for managing risks. Furthermore, the terms used within the definition of an insurance contract portfolio allow for a wide range of interpretations. For example, it is not clear what risks are considered to be "similar". The term similar could be referring to the probability distribution of the expected losses, but it could also refer to the origin of the underlying risk.[66]

In addition, the Exposure Draft offers the possibility to use replicating portfolio techniques instead of estimating the cash flows of the contract and adjusting them for the time value of money and the underlying risks separately. If such a replicating asset exists, the insurer can simply include the observable market price of this asset in the measurement of the whole contract.[67] However, this leads to another problem related to the level of aggregation: the observable market price of such a replicating asset or portfolio of assets does not necessarily reflect the above-described unit of measurement, which is to be applied when measuring insurance liabilities.[68]

Another aspect of the aggregation level that should be examined when analysing the decision usefulness of the resulting accounting data is the impact that it has on the relevance of the financial information. Applying the approach proposed by the IASB implies that an insurer has to measure the risk margin for insurance contracts on a portfolio level independent of its size. Hence, a large insurance company will have to apply the same diversification effects in its measurement as a small insurer, even if the large company benefits much more from diversification effects arising from different portfolios. The user of the financial statement is not able to consider that fact when focusing on the balance sheet, which would show an insurance liability of the same amount for both the smaller and the larger company. Consequently, it is crucial to inform the user of financial statements about further risk mitigation arising from diversification effects between different portfolios of insurance contracts within the notes.[69]

Recognition of the own financial strength

The accounting approach described by the Discussion Paper "Insurance Contracts" includes also the credit characteristics of insurance liabilities within their measurement, that is, when estimating the cash flows the insurer has to account for the probability that goes bankrupt and cannot pay its obligations.[70] However, the IASB abandoned this idea and does not intend to include the responsibility to consider the credit characteristics of insurance liabilities in a final accounting standard for insurance contracts. Considering the comments to the Discussion Paper both from

[66] For information on portfolio building from a risk theoretical point of view see Albrecht (1982), pp. 501–538 and CEIPOS (2010), p. 5.
[67] See ED/2010/8.B45-47.
[68] See Ellenbürger and Kölschbach (2010), p. 1231.
[69] This was also requested during the review phase of the discussion paper. For example see Fitch Ratings (2007).
[70] See ED/2010/8.BC50.

scientists and users, a majority of the IASB stakeholders certainly appreciates that fact.

Nevertheless, we would like to have a look at the effect of including credit characteristics in fair value measurement, as was the case for the Current Exit Value model.[71] The basic impact of recognising the own probability of default when estimating future cash flows is a reduction in the amount of the underlying liability. Accordingly, a deterioration of the final strength of the company leads to a respective profit in the income statement.

First, it is obvious that this approach creates misleading information for investors. Second, the recognition of the financial strength of an insurer is intensively disputed also from a conceptual perspective.[72] Furthermore, the recognition of the financial strength of an insurer would also lead to wrong incentives for the management of the insurance company if the management is interested in a high short-term annual result: as described above, the deterioration of the financial strength of the own company would lead to a profit in the income statement, so the management could be interested in deteriorating or at least not improving the company's financial strength.

Pre-claims liability for short-duration contracts

Unlike in the Discussion Paper "Insurance Contracts", the IASB proposes a different measurement approach for short-duration contracts. The *pre-claims liability*[73] for insurance contracts with coverage of approximately 1 year or less that do not contain embedded options or other derivatives that significantly affect the variability of cash flows is measured by allocating premiums over the coverage period. Therefore, the insurer has to calculate the so-called pre-claims obligation, which is the premium, if any, received at initial recognition plus the expected present value of future premiums, if any, that are within the boundary of the existing contract less the incremental acquisition costs. If the contract is not onerous, the pre-claims liability is the pre-claims obligation less the expected present value of all future premiums.[74]

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[71] See DP.232(a).

[72] Heckman (2004) argues that a reduction of the measurement of liabilities due to a reduction in own credit rating is related to the right of investors not to make any additional payments in case of bankruptcy (insolvency option). The value of this right would increase if the credit rating deteriorates and thus causes a reduction in the value of the liability. However, this right is seen as belonging to the investor and therefore should not be recognised in the company's balance sheet by reducing the corresponding liability. Furthermore, the concept of a Current Exit Value would require including the financial strength of the fictitious buyer of the insurance contract, but certainly not the own. On the other hand Rockel (2004) advances the view that the value of the so-called "insolvency option" should not be recognised in the balance sheet because other factors relating to the credit risk are also not included in the measurement of the liability (e.g. so-called financial distress costs). A synthetic value would never aim at including each impact observable in the real world.

[73] The pre-claims liability is defined as "An insurer's stand-ready obligation to pay valid claims for future insured events arising under existing contracts" (i.e. the obligation relating to the unexpired portion of risk coverage). See ED/2010/8.Appendix A.

[74] See ED/2010/8.54-59.

A contract is onerous if at initial recognition or subsequently the present value of the fulfilment cash flows relating to future insured claims that are within the boundary of an existing contracts exceeds the carrying amount of the pre-claims obligation. In this case, the insurer shall recognise an additional liability and a corresponding expense, measured as the difference between the carrying amount of the pre-claims liability and the present value of the fulfilment cash flows. This liability-adequacy-test is to be carried out on a portfolio basis, covering insurance contracts with similar date of inception.[75] The Exposure Draft does not contain any information about the frequency of the liability-adequacy-test. Thus, it is not clear whether it is only applied when an insurance contract is recognised for the first time, on a regular basis or whether it should be done when certain triggering events occur. However, once a contract is onerous, the additional liability has to be adjusted at the end of each reporting period.

The incremental acquisition costs are deferred and presented as a deduction from the part of the premium allocated to the remaining coverage period as described above. Those deferred incremental acquisition costs would be recognised as an expense over time in a pattern that is consistent with the pattern in which the premium is recognised as revenue to maintain consistency with the measurement for insurance contracts in general.[76]

The goal of this separate measurement approach for short-duration contracts is to simplify accounting of certain insurance contracts in order to comply with the cost-benefit principle.[77] However, this approach requires an insurer to implement a dedicated process to determine whether contracts are onerous (which requires the same information that would be needed to apply the general accounting model for insurance contracts according to the Exposure Draft) and also to apply a liability-adequacy-test as described above. Furthermore, we have to consider that this modified approach in general cannot be applied for all insurance contracts of an insurer. Therefore, an insurer would have to implement two different accounting models, a fact that definitely relativises the cost savings through the simplified approach.

Balance sheet, income statement and disclosures

The Exposure Draft "Insurance Contracts" demands the disclosure of substantial additional information to help users of financial statements understand the amount, timing and uncertainty of future cash flows arising from insurance contracts. Such additional information can, for instance, be found in the income statement: one requirement is to show the profits and losses, which result from changes of the risk margin, the residual margin, the estimation of the cash flows, the discount rate and losses at initial recognition of contracts separately.[78] In addition, quantitative and qualitative details about the aggregated portfolio also have to be given (e.g. about the

[75] See ED/2010/8.60.
[76] See ED/2010/8.BC148(d).
[77] See IASB Framework.44 and ED/2010/8.BC146.
[78] See ED/2010/8.72.

nature and extent of risks arising from insurance contracts). The level of aggregation of that information has to be chosen in a way that leads to a maximum of decision usefulness for the users of financial statements.[79] Furthermore, a detailed reconciliation from the opening to the closing balance consisting of:

- the carrying amounts at the beginning and end of the period,
- the number of new contracts recognised during the period, the cash-inflows and cash-outflows,
- amounts relating to contracts acquired from, or transferred to, other insurers in portfolio transfers or business combinations and
- the net exchange differences arising on the translation of foreign currency amounts into the presentation currency,

is required for insurance assets and liabilities separately and also for the risk and residual margin.[80]

In addition, the steps of the calculation of insurance liabilities are to be described in detail. The methods and the input parameters used for calculating the risk margin, the discount rate, the estimation of policyholder dividends and other parts that have the most material effect on the recognised amounts arising from insurance contracts have to be disclosed. The effects arising from changes in the input parameters have to be shown separately for each parameter if this has a major impact on the financial statements. Furthermore, the IASB proposes to show a measurement uncertainty analysis of the inputs that have a material effect on the measurement.[81] The Exposure Draft also imposes substantial disclosures on the risk management of the insurance company. Not only nature and origin of the underwriting risk, but also information on other risks (e.g. credit risks, liquidity risks and market risks) have to be disclosed.[82] The insurance company will also have to comment on the management of certain risks (goals, directives and processes) and how changes in particular parameters affect the result (sensitivity analysis).[83]

The purpose of the substantial disclosures on underwriting and other risks should be that users of the financial statements obtain a transparent view of how the insurance company sees future developments and are hence enabled to better estimate the uncertain future cash flows.[84] Probably, the IASB also wants to enhance the reliability of financial statements by requiring the insurer to give additional information as *transparency and reliability of financial information correlate positively*. Empirical studies have shown that accounting options and leeways when estimating input parameters for fair values do not necessarily lead to unreliable financial information. Transparency of *the possibilities for earnings management* (and earnings management will be possible in the case of insurance contracts as seen above) can lead to

[79] See ED/2010/8.79-84.
[80] See ED/2010/8.86-89.
[81] See ED/2010/8.90.
[82] An overview of the risks that an insurance company typically faces can be found for example in Bittermann and Lutz (2003), p. 391.
[83] See ED/2010/8.91-97.
[84] See ED/2010/8.BC242.

transparency of the whole financial statement, which makes the information reliable again.[85] However, we criticise the fact that the IASB is intentionally very unclear regarding the extent and quality of additional information.[84]

Conclusion

With the Exposure Draft, the IASB substantially modified the valuation approach for insurance liabilities compared to May 2007 when issuing the Discussion Paper. It is noticeable that the IASB was strictly orientated towards market prices in the Discussion Paper and has now abandoned that guiding principle completely. Finally, this was also due to the fact that in the eyes of a great majority of the respondents to the Discussion Paper, a synthetic construction of market prices would not be realisable. Furthermore, the IASB was influenced by the dramatic impacts of the recent financial crisis that became visible during the elaboration phase of the Exposure Draft: the crisis clearly showed that a price that can be directly observed on a market or which is indirectly derived from market observations, can be as inaccurate as the whole market is over or underrated. The question now is the extent to which the changed model proposed by the Exposure Draft can enhance the decision usefulness for the users of financial statements. We think that especially the risk margin that is based on internal assumptions in combination with the residual margin gives a distorted picture of economic reality. Giving a more detailed description and strict requirements would have enhanced the reliability of information from financial statements without decreasing the relevance of the information from the financial statement in such a dramatic manner. Furthermore, the proposed changes, especially the use of a residual margin, do not eliminate the possibilities for earnings management completely as shown in the section "Risk adjustment for the uncertainty related to the estimated cash flows". Auditing specialists will play an increasing role in ensuring the reliability and hence the quality of financial reporting of insurance companies. Research has evidenced that auditors have a significant impact on reducing cosmetic earnings management.[86]

Furthermore, it will be very interesting to see how the results of the second round of a field test conducted by the IASB will influence the accounting model defined through the final standard. The IASB clearly stated that it aims at identifying where more detailed implementation guidance may be required. However, results of the field test are still not available, a fact that together with the delays that we experienced from the beginning of this project makes the target release date of a re-exposure or a review draft in the first half of 2012 more than questionable. For the final standard, the IASB currently has not published any planned release date after it had adhered to a target release date in Q3 2011 for the first half of 2011. This re-postponement is certainly also due to many questions that are still open, for example whether changes in discount rate adjust the residual margin or are recognised in profit or loss, whether to restrict permitted techniques for the risk margin or the extent of disclosures about risk margin.

[85] See Coenenberg *et al.* (1983), p. 321 et sq.
[86] See Guan *et al.* (2006), p. 569.

Furthermore, other factors are also to be considered for the project "Insurance Contracts". For instance, the FASB deviates from the IASB in two essential points: In contrast to the Exposure Draft the FASB Discussion Paper excludes contracts with discretionary participation features from the scope of a standard for insurance contracts. In addition, the model does not contain a separate risk margin but calibrates the insurance liability directly to the premium by using a composite margin.

Both the IASB model and the FASB model deviate from the rules according to Solvency II, which require an adjustment of the insurance liabilities by an explicitly calculated risk margin.[87] In general, the concept of measuring insurance liabilities according to Solvency II is more related to a Current Exit Value than to a Fulfilment Value. Therefore, the Exposure Draft should be reviewed with respect to a consistent approach for accounting and solvency purposes. Some comments to the Exposure Draft stated that they welcome a similar approach for supervision and financial reporting purposes and that the IASB's approach is acceptable as it only deviates in some aspects.[88] However, we think that using a value based on discounted cash flows is not enough to make the two measurement models similar and to benefit from reusing possibilities. It will be the details, for example which margins to use, how to calculate the margins etc, that need effort and produce cost when implementing them. Taking into account that Solvency II and IFRS 4 projects will be required to run in parallel to the implementation of the already partly issued IFRS 9 "Financial Instruments", two different models for solvency and accounting purposes will lead to a lack of qualified resources in insurance companies. A close cooperation between the related projects for changing the relevant organisations and systems with regard to Solvency II and IFRS seems to be indispensable already today as both models will require similar valuation techniques, similar data, as well as similar quantitative and qualitative disclosures.

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[87] See directive 2009/138/EG of the European Parliament and of the Council on 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (SOLVENCY II) (recast), articles 76–77.

[88] See for example CEIOPS (2010), p. 5.

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