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Using Solvency II to implement IFRS 17

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How can you make the best use of existing Solvency II systems and processes to ensure as smooth and efficient a transition to IFRS 17 as possible?

Contents

Overview

Finalisation of requirements

After a number of years of development, Solvency II came into force on 1 January 2016. Many insurers completed the first annual reporting cycle just as the latest insurance accounting standard, IFRS 17, was published in May 2017. This publication explores how you can make the most of the similarities between the requirements of the two regimes, while highlighting the key areas of difference where most development is likely to be required.

As a prudential regulatory regime, the focus of Solvency II reporting is on the financial strength (capital resources) of the insurer as opposed to its performance during the year. As such, the Solvency II balance sheet is intended to reflect an 'economic' valuation of all assets and liabilities at the balance sheet date (although some would see aspects as being prudent). As a financial reporting regime, IFRS is focused on reporting not only the financial position at the balance sheet date but also the performance in the period. This gives rise to some of the differences between reporting under Solvency II and IFRS; in particular:

- Solvency II applies a consistent valuation approach to all contracts issued by insurers. Under IFRS 17, **'investment contracts'** issued by insurers which do not transfer significant insurance risk (and that do not contain a discretionary participation feature) are **accounted for as financial instruments** under IFRS 9 (by the effective date of IFRS 17), not as insurance contracts. Those which contain a discretionary participation feature are accounted for similarly to insurance contracts.
- Within insurance contracts, there may be **differences in the measurement model** depending on whether the contract contains direct participation features or meets the criteria required for the adoption of a simplified approach (known as the premium allocation approach). The valuation of insurance contract liabilities under both IFRS 17 and Solvency II is discussed in the 'Contract liabilities' section and Appendix A provides a more detailed comparison by topic.
- Under IFRS 17, the recognition of the **profit arising** from an insurance contract is **spread over the period of coverage** – this is achieved by the inclusion of a 'contractual service margin' liability which is not present under Solvency II. The implications of this new requirement are discussed in the 'Contractual service margin' section.
- Certain components of Solvency II are heavily prescribed by regulation or set at a legal entity or fund level - the allowance for risk and the discount rate, for example. IFRS 17 is **more principles-based** which allows for greater levels of judgement to be incorporated. But the **significantly lower tracking** of movements in liabilities for profit recognition under IFRS 17 is likely to drive a number of new system developments.
- The focus on reporting of performance under IFRS may lead to **changes in the value of insurance liabilities** (and certain financial assets) resulting from **changes in market variables not being reported within profit or loss** (as discussed in the 'Contract liabilities' section).
- IFRS 17 contains **specific requirements regarding the reporting of revenue** in the income statement and there are **significant differences between the disclosures** required under Solvency II and IFRS (as discussed in the 'Presentation and disclosure' section).
- The extent of differences between IFRS 17 and Solvency II will have **significant operational impacts on data and systems** (as discussed in the 'Impact on wider data and system architecture' section). There may be impacts on extracts from policy administration systems and the construction of data warehouses, through to more granular cash flows in actuarial and other model solutions, and then downstream consequences on ledgers and consolidation tools.

A key aspect of the Solvency II regime is the requirement for an insurer to have sufficient financial strength to absorb future adverse developments. This is achieved through the requirement for insurers to hold a solvency capital requirement (SCR). There is no equivalent concept to the SCR within IFRS 17, and this publication does not consider Solvency II's requirements around calculating and reporting the SCR.

Scope for leverage

For contracts within the scope of IFRS 17, the liabilities under both regimes are based on a probability-weighted estimate of the future cash flows, discounted at an appropriate interest rate; plus an allowance for the risk. There is therefore significant opportunity to use the same cash flow models for both Solvency II and IFRS 17, potentially with some changes.

Key considerations when adopting this approach include:

1. **Cash flows** – There is a large degree of overlap in the cash flows to be included, but there may be differences in the treatment of acquisition and certain overhead expenses, and of cash flows relating to participating contracts. Insurers are therefore faced with the choice of building flexibility into existing models, so that they can cope with both metrics, or taking copies of the Solvency II models and adjusting them to create parallel models which meet the requirements of IFRS 17.
2. **Discount rate** – This is largely prescribed under Solvency II, while IFRS 17 is more principles-based and offers more scope for management choice. There may be certain blocks of business for which the same discount rate can be used for both metrics, but most insurers are likely to have at least some business where the rates differ. In addition, IFRS 17 requires the use of the discount rate which applied at inception in certain circumstances, rather than always using current rates. While these differences will generally not require changes to the models themselves, they will increase the number of model runs required in each reporting period and potentially put pressure on reporting time scales.
3. **Granularity of information** – IFRS 17 requires information to be tracked at the level of groups of contracts, which are subdivisions of products according to both their expected profitability at inception (whether or not they are or may become loss-making) and the time at which they were written (with each group covering no more than a year of new business). In practice for certain products that are sensitive to market conditions and regularly repriced, insurers may select a lower level of grouping (such as quarterly or monthly) to avoid onerous contracts being recognised. Solvency II does not require this level of granularity in the tracking of movement and so additional data storage and model development are required.

The Solvency II risk margin calculation also provides a potential starting point for the IFRS 17 **risk adjustment**, although the principles-based rather than prescriptive approach of IFRS 17 allows scope to adopt a technique other than cost-of-capital. Indeed, the requirement to disclose the confidence level associated with the risk adjustment may make a direct confidence interval approach more appealing. This could still leverage Solvency II developments through use of the modelled distributions of non-financial risks.

Key considerations if adopting a cost-of-capital approach include:

4. **Scope of calculation** – The risk adjustment is only in respect of non-financial risks and thus covers a narrower selection of risks than the Solvency II risk margin does. The allowance for diversification between risks may also differ between the two metrics. These differences may require changes within the calculation model, while using a different cost-of-capital rate is a simple parameter change.
5. **Additional information** – IFRS 17 requires the risk adjustment to be measured and tracked separately for the gross liability (or asset) and reinsurance held, each at the level of groups of contracts, while the Solvency II risk margin is based only on the net of reinsurance position at the entity level. These requirements add to the complexity of the IFRS 17 calculations. There is also a question as to whether allocating an entity level assessment to annual groups provides a relevant risk allowance at this lower level.

The final part of the liabilities under IFRS 17 is the **contractual service margin (CSM)**, for which there is no equivalent under Solvency II. Systems will be required to model and track this for annual groups.

Outline of this publication

This remainder of this publication examines the various technical and practical challenges and key similarities and differences between IFRS and Solvency II in the areas of contract liabilities, disclosure and presentation. It then briefly considers wider systems and infrastructure implications. The appendices provide a more detailed point-by-point technical comparison between IFRS and Solvency II.

The publication is based on our current understanding of the final requirements for both Solvency II and IFRS 17, however interpretations may evolve as we get closer to the effective date of 1 January 2021.

Contract liabilities

Measurement model

Both Solvency II and IFRS 17 base the measurement of insurance contract liabilities on the concepts of a probability-weighted estimate of the future cash flows, the time value of money and an additional allowance for risk.

In IFRS 17, an additional contract liability known as the contractual service margin ('CSM') is included to eliminate any gain on day one (while all day-one losses are recognised as incurred). There is no equivalent concept to the CSM in Solvency II or in many current GAAPs. For short duration insurance contracts, which make up the majority of non-life contracts, a simplified unearned premium approach (known as the premium allocation approach) is permitted but not required under certain circumstances for pre-claims contract liabilities in IFRS 17. There is no equivalent concept in Solvency II.

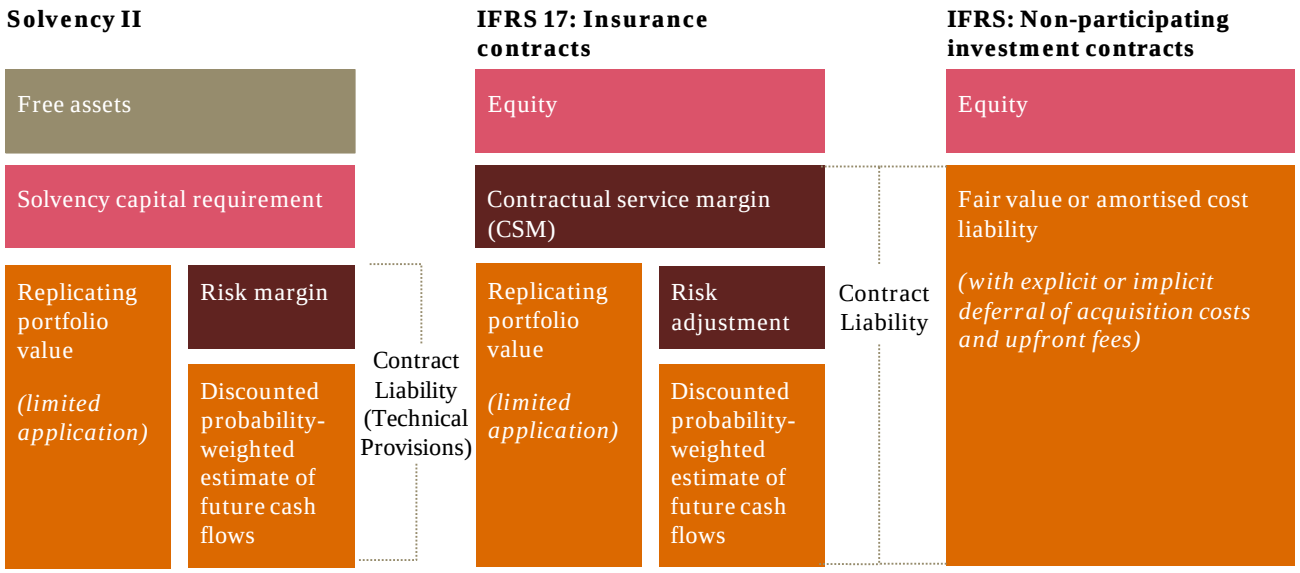
Under IFRS, the measurement of contracts depends on their classification as either insurance or investment, while Solvency II makes no such distinction. The IFRS classification depends on the level of insurance risk transferred to the insurer and the definition is broadly unchanged from current IFRS 4. In addition, investment contracts with a discretionary participation feature (participating investment contracts), where issued by an insurer, fall within the scope of IFRS 17. References to insurance contracts throughout this publication generally include these participating investment contracts.

Non-participating investment contracts, for example pure unit-linked savings contracts, are similar in nature to instruments found in other markets and sectors and, as a result, are subject to the IFRS financial instruments and revenue standards (IFRS 9 and IFRS 15 respectively by the effective date of IFRS 17). The contract liability is typically measured at fair value or at amortised cost with additional deferral mechanisms for certain acquisition costs and upfront fees.

There is a requirement to unbundle certain components of contracts and measure them under different IFRSs, such as certain embedded derivatives and distinct investment components. In practice, these situations may be limited.

Figure 1 illustrates the comparison of the Solvency II and IFRS measurement of contract liabilities.

Figure 1: Solvency II versus IFRS requirements[1]



- Risk margin sets the technical provisions as the expected amount required to take over and meet the obligations (as defined by the regulations).
- Replicating portfolio methods are allowable with constraints (limited expected application).
- As a regulatory regime, there are capital requirements. The Solvency Capital Requirement (SCR) is calibrated to ensure adequacy to withstand a 1-in-200-year event.

- Risk adjustment is the compensation the insurer requires for bearing the uncertainty inherent in the amount and timing of cash flows that arise from non-financial risk.
- Replicating portfolio methods are allowable with constraints (limited expected application).
- Contractual service margin (CSM) is set to avoid a day-one gain.
- Acquisition costs are included in the fulfilment cash flows resulting in implicit deferral of these costs.

- Contracts separated into financial instrument and investment management service component (assessed primarily under IFRS 9 and IFRS 15).
- Initial measurement of financial instrument is at fair value. Subsequent measurement is at fair value or at amortised cost, depending on features of contract.
- Investment management service model contains deferral of acquisition costs (DAC) and upfront fees (DIR).

Source: PwC analysis based on our current understanding of the final requirements.

Figure 2 on the following pages presents a summary of the main differences between IFRS 17 and Solvency II contract liabilities based on our understanding of the final requirements. The significance of each topic is graded to provide a broad indication of the extent of differences across technical, financial and operational considerations. The extent of differences will vary by insurer depending on their current circumstances.

[1] The relative size of the diagram is purely for illustration purposes only and could differ significantly by product and company. A number of simplifying assumptions have been made. Asset valuations may differ between Solvency II and IFRS resulting in differences in free assets and equity respectively. For insurance contracts, it assumes that there are no components to be separated and it does not indicate the option of using the premium allocation approach.

Figure 2: At a glance, a summary comparison of the main differences between IFRS 17 and Solvency II contract liabilities.

Topic	Significance	IFRS 17	Solvency II	Observations
Definition and scope		Insurance (and participating investment, for companies that also issue insurance contracts).	All contracts regulated as insurance (in specific jurisdictions).	The measurement of non-participating investment contracts in IFRS will be significantly different to Solvency II.
Separating components		Separation of distinct investment components, certain goods and non-insurance services and certain embedded derivatives.	No separation of components.	Where components are separated in IFRS then the measurement will often be different from Solvency II.
Recognition		Date coverage begins or date first payment due for a 'group' of contracts (earlier for a group of onerous contacts).	Date coverage begins or date party to contract.	Potential for different recognition due to the 'first payment' (IFRS) versus 'party to' (Solvency II) condition; and the level of grouping and onerous contract test in IFRS.
De-recognition		Date obligations are extinguished or upon substantial modification of the contract.	Date obligations are extinguished, discharged, cancelled or expired.	Likely to be similar, however, there is no IFRS concept of modification in Solvency II.
Granularity (grouping of contracts)		Potential for three groups (based on profitability) per portfolio per annual cohort.	Prescribed grouping by type of contract.	Will result in a significantly more granular tracking of liability movements over time in IFRS than Solvency II.
Contract boundary		No longer has substantive rights to receive premiums or obligations to provide services since the risks of the policyholder or portfolio in setting the price or level of benefit can be reassessed.	No longer required to provide coverage or can amend terms to 'fully reflect risk' at portfolio level (unless individual life underwriting took place).	The contract boundary definition could be different between Solvency II and IFRS.
Cash flows (excluding acquisition costs)		Cash flows related directly to the fulfilment of the contracts.	All cash in-and out-flows required to settle the obligations over the lifetime.	There are differences in the cash flows included in the two frameworks. For example, the treatment of certain overhead expenses and participating contract cash flows (see later).
Acquisition costs		Attributable at portfolio level and included in measurement of liability.	Expensed as incurred.	Unlike in IFRS, there is no (implicit) deferral of acquisition costs under Solvency II.
Discount rate		'Top-down' or 'bottom-up' reflecting the characteristics of the liability. Both current and inception rates required. (Inception for CSM and OCI purposes (where applicable).	Prescribed based on swaps less credit risk (plus matching or volatility adjustment in certain circumstances). Current rates only.	Conceptually, a top-down approach in IFRS is similar to Solvency II with the application of a matching adjustment. The volatility adjustment is not a feature of the liabilities so is unlikely to apply in IFRS.

Topic	Significance	IFRS 17	Solvency II	Observations
Allowance for risk	●	No prescribed method. Company's own view of the compensation required for uncertainty arising for non-financial risks (only). Gross of reinsurance.	Prescribed 6% cost of capital method, with defined risks, level of diversification benefit and other components. Net of reinsurance.	The Solvency II risk margin is prescribed, while the IFRS risk adjustment is principles-based. It is likely that there will be differences in the two approaches.
Profit recognition	●	CSM eliminates day-one gain and defers profit over the coverage period. Day-one losses are recognised immediately. CSM is subsequently updated for certain changes.	Day-one gains or losses are recognised for all contracts, including reinsurance.	The CSM is a key driver in the timing of profit recognition under IFRS and the reason for more granular tracking of liabilities movements over time in IFRS. There is no equivalent concept in Solvency II.
'Simplified method' for certain short duration contracts	●	'Unearned premium' model (the 'Premium Allocation Approach') for certain pre-claims liability, while cash flow projection required for the claims liability.	No separate model.	In IFRS, the Premium Allocation Approach is optional. Depending on the nature of the contracts there could be a difference between Solvency II and IFRS.
Contracts with a participation feature	●	'Market consistent' measurement principle. Cash flows from the participation feature are included in the liability, including where these relate to future policyholders.	'Market consistent' measurement principle. Cash flows from the participation feature are included in the liability except for 'approved surplus funds'.	The IFRS treatment of residual assets in the participating fund and the allocation between liability and equity will depend on the specific nature of the contracts and national law. In Solvency II, national law defines 'surplus funds'.
Reinsurance contracts	●	All components presented gross of reinsurance; separate reinsurance asset. Specific requirements apply to reinsurance contract held.	Presented gross of reinsurance with a separate reinsurance asset (except for the risk margin). Reinsurance often mirrors the direct contract.	Unlike Solvency II, reinsurance under IFRS may not mirror the underlying direct contracts. Presentation of the allowance for risk is different between IFRS (gross and reinsured) and Solvency II (net).
Business combinations and transfers	●	Additional recognition and measurement principles apply at the point of combination or transfer.	Recognised and measured as if written by the reporting entity from inception.	Additional IFRS differences contrast with Solvency II where there is no difference between directly written or acquired business.
Transition	●	Approaches other than full retrospective application permitted, primarily in relation to the CSM on existing business at the point of adopting the standard.	Where approved, transitional measures on technical provisions smooth the impact on initial adoption for up to 16 years.	Different transitional arrangements in IFRS and Solvency II

● **High** ● **Medium** ● **Low**

Source: PwC analysis based on our current understanding of the final requirements.

The following subsections of this publication explore in more detail the main differences between the measurement models for IFRS 17 and Solvency II contract liabilities.

Cash flows

The use of estimated future cash flows is the foundation of both frameworks. However, there are some potential differences which will present practical difficulties.

The use of estimated future cash flows is the foundation for the measurement model for Solvency II and IFRS 17. However, there are some differences which may present practical difficulties, necessitating either separate models or greater flexibility within a single model. We highlight three specific areas:

Scope of cash flows

In both Solvency II and IFRS 17, there is explicit guidance as to which cash flows are to be included in the measurement of the liabilities. Many of the cash flows are the same in the two models, such as premiums and claims. However, not all of the cash flows are fully aligned. For example, the inclusion of certain overhead costs may be different (notably a potentially narrower definition in IFRS 17), which may trigger changes in your expense allocation process and lead to two sets of expense assumptions, as might the treatment of cash flows on participating contracts (which are covered in more detail later).

Acquisition costs

In IFRS 17, the cash flow model includes directly attributable acquisition expenses and so there is implicit deferral of these expenses through a reduction in the CSM calculated at outset. There is no equivalent concept of deferring such costs over the life of the contract in Solvency II. However, many current GAAPs permit an explicit deferral of acquisition costs as an asset on the balance sheet so, while the exact definition of acquisition costs permitted to be deferred may be different, you may well have the systems already in place to capture this data. For non-participating investment contracts in IFRS, there is (and will continue to be) explicit deferral of acquisition costs as an asset on the balance sheet, but with a narrower definition of the costs permitted to be deferred compared to insurance contracts (broadly costs that are incremental at the contract rather than portfolio level).

Boundary of a contract

The boundary of a contract represents the point beyond which the policyholder no longer has substantive rights under the contract, and the insurer no longer has a substantive obligation to provide services. Any cash flows beyond the boundary are not recognised in the measurement of the liability. The boundary will be the same in the two frameworks for many contracts but there is a risk that some differences may exist, depending on the terms of the contracts. For example, there is a requirement in Solvency II to separate contracts into components, where the contract boundary differs between components. There is no equivalent requirement in IFRS.

In Solvency II, contract boundary considerations also apply to contracts which would typically be non-participating investment contracts in IFRS (e.g. unit-linked pension contracts). Under certain circumstances, which the supervisors in some territories agree includes the presence of a cap on the charges taken from unit-linked funds, future premiums can be included in the Solvency II cash flows and, as a consequence, embedded profits arising from these future premiums are included on the balance sheet, resulting in a lower liability being posted. In the absence of such conditions, the contract boundary is the valuation date and so future premiums, and the profits arising from them, are excluded from the balance sheet (albeit profits arising from paid premium are included). In IFRS, the liability is measured at fair value or at amortised cost which, for unit-linked contracts is usually the unit balance (due to the deposit/surrender value floor requirements) and so excludes the profit arising from both paid and future premiums.

Insurers will require data and cash flow model developments to deal with these implications.

Discount rate

Differences in approach between Solvency II and IFRS, including the requirement for current and inception rates in IFRS, introduce a number of operational challenges.

For insurers writing long-term savings products or with long-tailed claims liabilities such as those arising from periodic payment orders, the valuation of contract liabilities and the resulting solvency ratios and accounting profit are highly sensitive to the selection of the discount rate.

Under Solvency II, the basic discount rate to be used is determined by the European regulatory body based on the swap curve. Subject to the relevant supervisory approvals, insurers may choose to add either a matching adjustment (applicable to certain contracts and determined with reference to the backing assets) or a volatility adjustment (applicable more widely and prescribed by the European regulatory body).

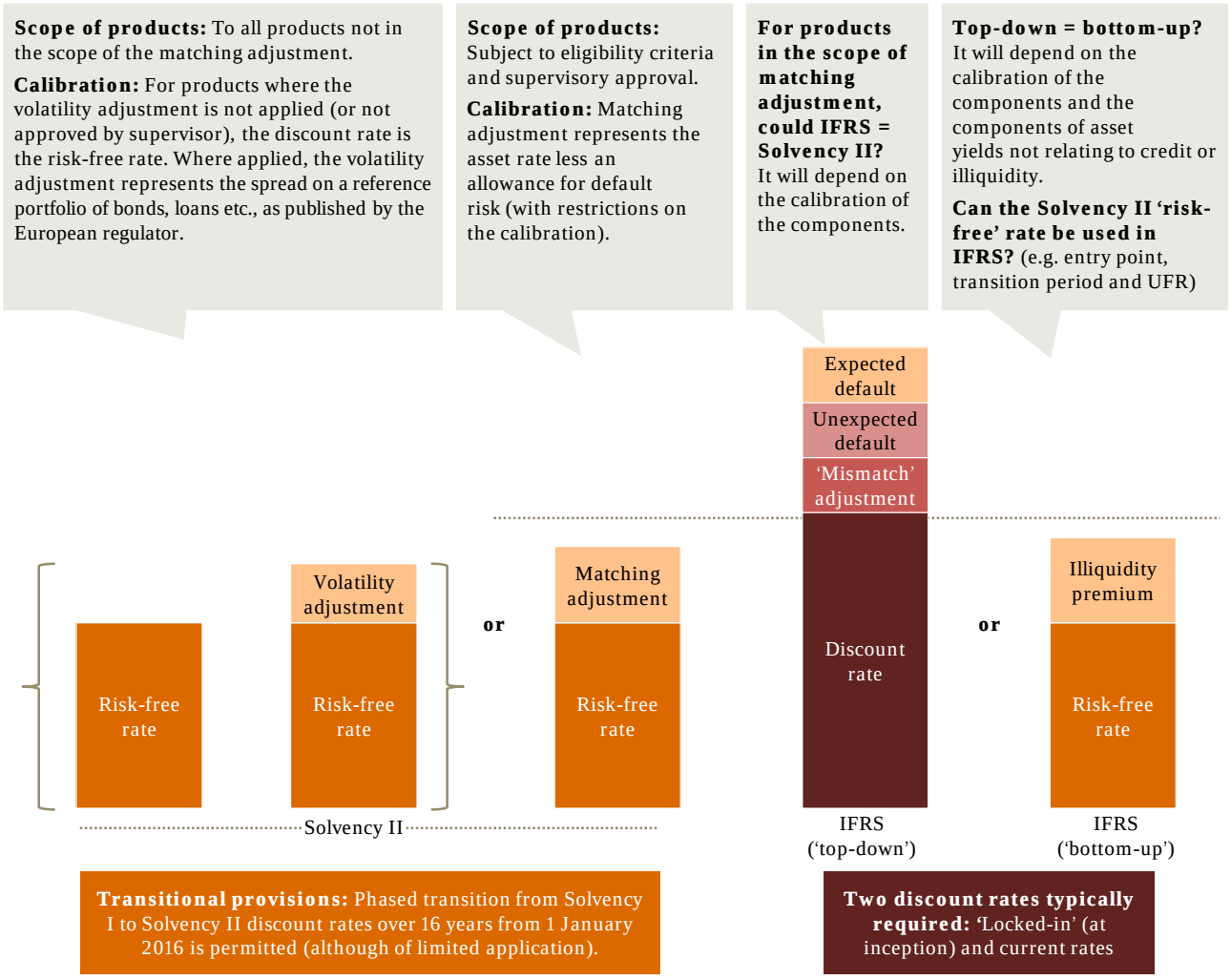
In IFRS 17, the approach to determining the discount rate is principles-based and it must reflect the characteristics of the liabilities. You can use a 'top-down' approach, starting with the yield on the supporting or reference assets with deductions for default (both expected and unexpected) and 'mismatch' risk (to adjust for differences in the timing of asset and liability cash flows), or a 'bottom-up' approach, starting with the risk-free reference rate and adding an illiquidity premium. A top-down approach is likely to be applied for 'spread-based' insurance contracts, in particular annuities in payment.

Figure 3 illustrates the difference in approaches between Solvency II and IFRS. Considerations if seeking to adopt elements of the Solvency II approaches in IFRS would include:

- **Risk free rate** – For some currencies the calibration of Solvency II's risk-free yield curve, including the assessment of the entry point to extrapolation (e.g. 20 years for Euro, 50 years for GBP etc.), the transition period and ultimate forward rate (UFR), will need to be assessed compared to IFRS 17 requirements to reflect available market data.
- **Volatility adjustment** – The inclusion of Solvency II's volatility adjustment would appear unlikely to be appropriate given the requirement to reflect the characteristics of the liabilities in IFRS 17 and the non-specific nature of its calculation.
- **Matching adjustment** – There are similarities between Solvency II's matching adjustment and the top-down approach under IFRS 17 (given the close cash flow matching of the supporting assets to the liabilities in Solvency II). However, insurers will need to consider how a matching adjustment calculated at an aggregated level (commonly across a whole annuity portfolio) is applied in the context of the annual groups in IFRS 17. In addition, insurers will need to assess the calibration of the Solvency II fundamental spread (based on historic defaults) compared to the IFRS requirements to allow for both expected and unexpected default risk for debt instruments.

In IFRS 17, insurers can make a choice about the presentation of the impact of changes in the discount rate (and certain financial risks) over time – they may either be presented in profit or loss or disaggregated between other comprehensive income (OCI) and profit or loss. There is no equivalent concept in Solvency II. Any use of OCI will require the contract liability to be measured based on both the current and the 'locked-in' (at inception) rates (or financial variables), which will introduce additional data and system requirements. Further, bringing added complexity, weighted-average discount rates may be needed due to contracts being recognised on a group basis. The element of choice may limit accounting mismatches in the income statement and, in particular for insurance contracts with direct participation features where the insurer holds the underlying assets, may eliminate the accounting mismatch completely.

Figure 3 – Illustrative discount rate comparison: Solvency II versus IFRS 17[2]



Source: PwC analysis based on our current understanding of the final requirements.

In addition, a transitional measure on the discount rate exists in Solvency II, although it is not in widespread use. Insurers are permitted to move from a discount rate calculated under Solvency I rules to a fully Solvency II compliant rate over a period of 16 years for business in force at 1 January 2016. This could result in liabilities with the same characteristics having different current discount rates in Solvency II, which would be challenging to justify in IFRS.

Where there are differences between the discount rates in Solvency II and IFRS, including the requirement for locked-in rates in IFRS, this will introduce a number of operational challenges, including dual assumption and valuation processes, potentially different asset data requirements, multiple economic scenario calibrations and additional model runs and reconciliations.

For short duration insurance contracts, the issue of discounting is less significant for the pre-claims liability. However, it is important to be aware of the implications for the liability for incurred claims (post-claims) particularly long-tailed claims liabilities such as those arising from periodic payment orders and latent claims (such as asbestosis).

[2] The relative size of the diagram is purely for illustration purposes only and could differ significantly by product line and company.

Allowance for risk

The Solvency II risk margin could be recalibrated for IFRS 17 and would be available, but is this operationally the best route?

The concept of an explicit adjustment for risk is fundamental to both Solvency II and IFRS 17. In Solvency II, the allowance for risk is determined following a 'cost of capital' approach with a prescribed calibration. In IFRS 17 there is no prescribed method and the calibration must conform to a principle: '*the compensation that the entity requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk*'. IFRS 17 also requires separate risk adjustments for the gross liability (or asset) and reinsurance held, while Solvency II has a single risk margin based on the net of reinsurance position. Figure 4 below summarises the differences between the two approaches.

Figure 4 – Summary of the differences between the Solvency II and IFRS 17 allowances for risk

Topic	Solvency II	IFRS 17
Approach	'Transfer value' – prescribed (e.g. cost of capital at 6%, 99.5% risk allowance etc.)	Compensation for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk
Scope of risks	Prescribed set of risks	Narrower than Solvency II
Calibration of risks	Standard formula or internal model (where approved)	Not prescribed (principle-based)
Diversification	Entity level	Not prescribed (principle-based)
Impact of reinsurance	Single net of reinsurance risk margin	Separate risk allowance for insurance and reinsurance held
Unit of account	Line of business	Group of contracts (for CSM purposes notably)
Tax	Impact of loss adsorbing capacity of deferred tax (LACDT) not permitted	No prescribed approach to LACDT
Disclosure of confidence level	No	Yes

Source: PwC analysis based on our current understanding of the final requirements.

If you are subject to Solvency II, it may be appealing to make use of the models you have developed for this purpose and so to adopt a cost of capital approach under IFRS. In this case, there is the potential in IFRS to have a different calibration from that used in Solvency II, for example differences could exist in respect of the assumed cost rate and the level of diversification benefit. Differences are also required in the risks included in the calculation, as IFRS 17 explicitly excludes financial risks (residual market risk in Solvency II) and general operational risk, and it would not be appropriate for the risk adjustment on gross liabilities to include the credit risk associated with reinsurance contracts as in Solvency II. The extent of changes required to the Solvency II models is a key consideration in the selection of an approach, as the benefits of leveraging the Solvency II approach may not be as great as initially expected.

A potential downside of the cost of capital approach is the IFRS 17 requirement to disclose the confidence level associated with the risk adjustment, regardless of the approach used for the calculation. This requirement may be met more easily by using a direct confidence interval approach, which can still leverage recent Solvency II developments if you have an internal model and so produce full expected distributions of non-financial risks.

Either way, the dependence of the risk adjustment on modelled capital requirements is likely to present some operational challenges for the production of sufficiently granular results within the deadlines required for the production of the financial statements. Approximations may be required, for example estimating the risk adjustment as a proportion of the discounted value of future cash flows for each group of contracts, with the estimated proportions calibrated using fully modelled results at an earlier date. Such approximations may also be useful in producing the additional information required for the disclosure of reconciliations and sensitivities.

At inception of a contract, a difference in the calibration of the allowance for risk between IFRS and Solvency II does not impact IFRS profit or loss as it is offset by the calculation of the contractual service margin (to the extent that there is a gain at inception). However, the difference will impact the future recognition of profit due to the different patterns of releasing the risk adjustment and contractual service margin to profit or loss.

Contractual service margin

How will insurers develop a modelling solution for the contractual service margin?

As the contractual service margin (CSM) is a concept with no direct comparison in Solvency II or many current GAAPs for insurance contracts, you will need to develop a new model or separate system to determine this element of the liability and its release to profit or loss during the lifetime of the contracts. While technical experts within insurers are now assessing what methodology should be used to calculate the CSM, technology and IT professionals are now investigating what platform should be used to calculate the CSM. There are currently two different schools of thought, for some investigation is focused on an extension of the financial modelling platforms (e.g. finance data warehouse) while for others it is focused on an extension of actuarial and risk platforms. Technology vendors are currently developing solutions for both schools and some insurers are also assessing internal development options.

The CSM is determined at the level of groups of contracts within a portfolio. The release of the CSM is broadly in the period in which the insurance coverage (or service) is provided and so it will be important both to decide on a definition of 'coverage units' and to develop systems which can handle them appropriately. Changes in the measurement of the cash flows and risk adjustment that are recognised in the CSM rather than in profit or loss over the reporting period differ depending on whether or not a contract has a direct participation feature:

- **Contract without a direct participation:** For contracts without such a feature (e.g. annuities in payment or periodic payment orders), the CSM is increased for interest ('accretion') at each reporting period at the locked-in rate (as considered in the discount rate section). Broadly, changes in estimates of future cash flows and risk adjustment are not recorded in profit or loss when they relate to future service (e.g. a change in longevity assumption), but are offset in the CSM ('unlocking'), subject to the CSM not becoming negative. You will still need to monitor a negative CSM (a 'loss component') as further changes in the estimates of future cash flows could result in the CSM becoming positive in future periods, in which case it would once again be presented as part of the liability on the balance sheet. Other valuation changes, for example due to change in the discount rate (or the effect of financial risk) are not viewed as relating to future service, and so are not offset by the CSM. The requirements to unlock the CSM and to accrete interest introduce greater complexity and more granular data requirements than many current practices.
- **Direct participating contracts:** For contracts with a direct participation feature (e.g. certain unit linked contracts), the accretion of interest is replaced by adjustments for the entity's share of the change in the fair value of the underlying items. Changes relating to future service which may be offset in the CSM additionally include changes in financial guarantees. You also have a choice over the extent to which you recognise these changes in the CSM if you use derivatives to mitigate the financial risk arising (i.e. hedge), subject to certain conditions, and may use that choice to reduce potential accounting mismatches between the treatment of assets and liabilities. This optionality and the differences in treatment between contracts with and without direct participation features layer on further operational complexity for insurers. The approach for direct participating contracts is commonly known as the '**variable fee approach**'.

The box below poses key questions to consider for developing a model to determine and manage the CSM.

Key questions to be considered in developing a CSM model:

1. What is the definition of your portfolios and of groups within those portfolios, and do your existing cash flow and risk allowance models provide the required information at this level?
2. What pattern will you use to release the CSM to profit or loss? How will the concept of 'coverage units' be applied?
3. Can you identify in your models the impact from changes in estimates of future cash flows and risk adjustment to unlock the CSM?
4. What are the system options for modelling the CSM (e.g. extension of financial modelling versus actuarial/risk platforms)?
5. Will you use a system from an external vendor or build it internally?
6. A reconciliation of the CSM between reporting periods has to be disclosed (with the transition amount separate in some circumstances). How will you prepare this analysis?
7. Once established, movements in the CSM will be a significant component of profit in each period. How will you explain and analyse this internally?

The answers to these questions (among others) will help to determine the model requirements to implement the CSM.

Profit participations

The basic definition of a 'participation' feature is similar in Solvency II ('profit participation') and IFRS 17 ('discretionary participation' with or without significant insurance risk). All contracts with such features issued by an insurer are in the scope of IFRS 17. In both frameworks, future cash flows arising from the participation feature are assessed in the same way as any other contractual cash flows, that is, on an expected present value basis with an explicit allowance for risk. In addition, the allowance for the interaction between investment-related cash flows and the discount rate are both broadly 'market consistent'.

In IFRS, all expected payments to current or future policyholders arising from premiums within the contract boundary are treated as a liability, even when at the insurer's discretion. In Solvency II, discretionary benefits are also included in the liabilities but no liability is required for 'surplus funds' where this has been defined under national law. The implications of these approaches will depend on the specific nature of the participation feature and the approved national law. For example, in the UK, surplus funds represent accumulated profits which have not been made available for distribution to the policyholder, so these amounts are not recognised in the Solvency II liabilities, but would likely contribute under IFRS 17.

There are certain areas where the practical application of IFRS 17 to contracts with participation features will continue to develop over the period until the standard becomes effective. Such areas include:

- The interactions of (annual) groups of contracts which share the same pool of underlying investments for the purposes of measuring the CSM.
- How to ensure that the approach to valuing options and guarantees remains able to reproduce observable asset prices when a liquidity premium is included in the cash flows and the discount rate.
- The interaction between the CSM, profit and equity for mutual insurers.

Reinsurance held

In both Solvency II and IFRS, amounts relating to reinsurance contracts held are valued separately from the underlying insurance contracts (with the exception of the allowance for risk in Solvency II as considered previously). However, while in Solvency II there is generally symmetry (with certain exceptions) between the gross and reinsured positions, this is not necessarily the case in IFRS 17.

In IFRS 17 there are specific requirements for reinsurance contracts held; for example, the variable fee approach is not permitted (regardless of whether the underlying insurance contracts can apply the approach) and recognition is potentially different to both Solvency II and the underlying insurance contract measured under IFRS 17. Further, instead of recognising a day one gain on entering into a reinsurance contract, a reinsurance CSM is held to defer the gain. In the case of a loss it is either recognised immediately (if the contract is for past events) or spread over the coverage period (if it relates to future events). As a consequence, the 'economic' net exposure between the gross and reinsured positions may not be fully reflected in the accounting on day one. Insurers and reinsurers may therefore seek to redesign contracts to achieve an optimal accounting outcome. After day one there are specific reinsurance-related requirements on unlocking the CSM on reinsurance contracts held, including to mirror in certain circumstances the unlocking of the CSM on the underlying insurance contracts.

The specific reinsurance requirements in IFRS 17 will result in additional operational complexity compared to Solvency II for both external and internal reinsurance arrangements that insurers have in place.

Transition

Full retrospective application will be challenging under IFRS as the CSM on transition will require an assessment of contract profitability at outset and then rolled forward to the current date, a period of over 20 years on some contracts.

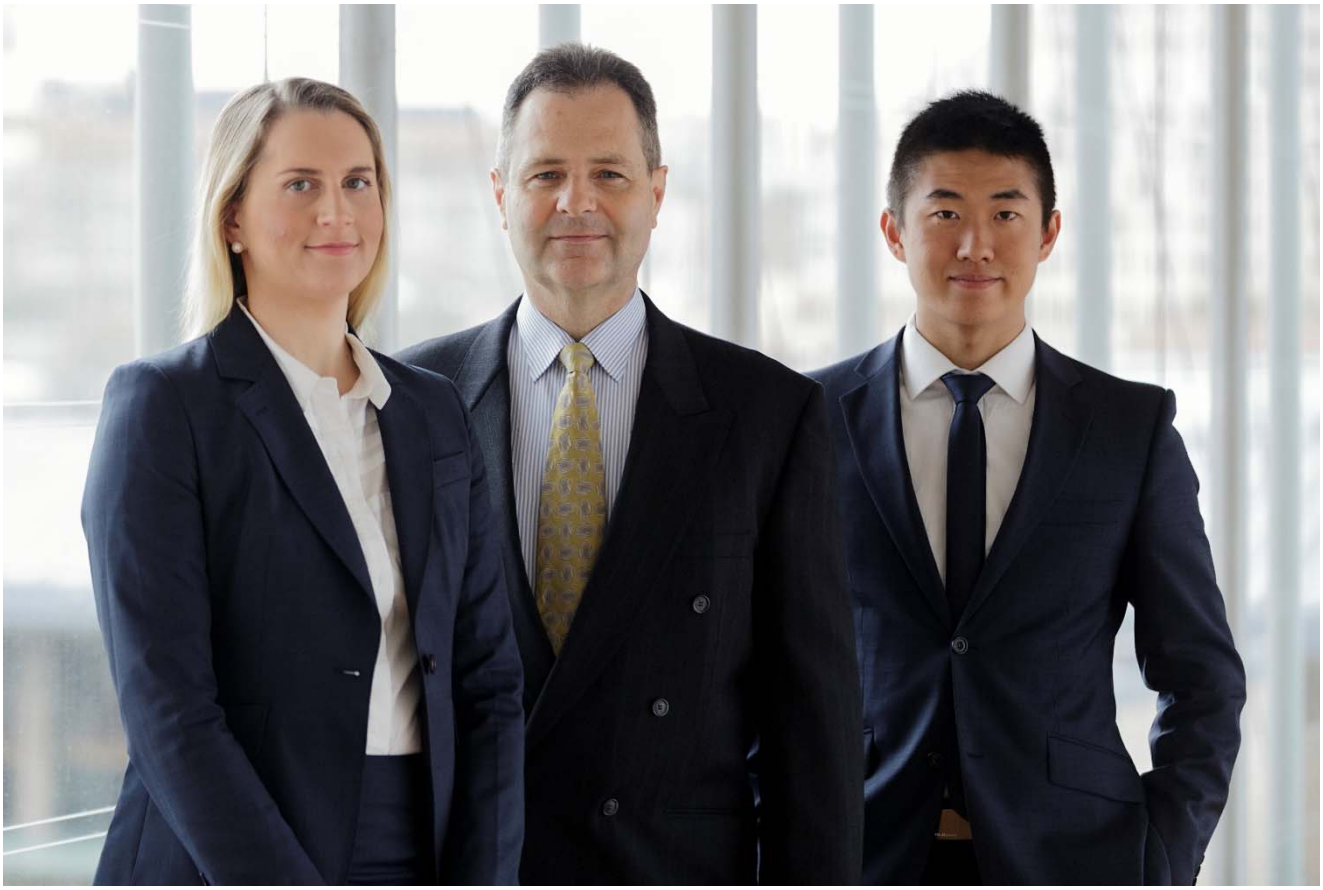
IFRS 17 requires full application to the business in force at the point of implementation, as Solvency II did. In Solvency II, transitional measures (such as the discount rate measure discussed earlier and the more widely used transitional measure on technical provisions) allow the financial impact of this application to be phased in over time. In IFRS 17, no such measures exist and an approach must be found to identify, recognise and measure each group of contracts at the point of implementation as if IFRS 17 had always applied. Amongst other considerations, this requires determination of the CSM and of the cumulative amount recognised in other comprehensive income for each group of contracts at the implementation date.

As Solvency II is a fully prospective measure, there was limited additional complexity from the requirement to apply it to existing business. However, this will be challenging under IFRS 17, as the CSM on transition will require an assessment of contract profitability at outset which is then rolled forward to the current date, a period of over 20 years on some contracts. The importance of this assessment cannot be overstated given the significant impact the CSM will have on IFRS earnings following implementation.

Transition estimation methods are permitted to determine the CSM when it is impracticable to perform a full retrospective calculation. Certain simplifications are permitted in the 'modified retrospective' calculation, or insurers may adopt a prospective 'fair value' approach using an appropriate reference point such as external transactions or other reporting metrics (for example embedded value or adjusted Solvency II technical provisions) to inform the fair value measurement. Gathering data in the right format and at the right level of granularity is likely to be a substantial exercise, which should not be underestimated. An assessment on a product by product basis will help to tailor the approach to those products where the most significant profit margins have existed and so the potential for a significant CSM. However, even where the CSM may be clearly zero (or negative) due to age or adverse demographic assumption changes in the past it may still need to be assessed in case it subsequently becomes positive due to reversal in experience. Whichever approach is adopted, it will need to be robust and capable of being audited.

Where insurers have in the past acquired or transferred a block of business (as is common), the CSM on transition is assessed for the purposes of consolidated group accounts from the date of this event rather than from outset of the underlying contracts. However, for subsidiary accounts under IFRS 17 it is assessed from the outset of the underlying contracts. There is therefore a risk of a 'double' transition with two distinct CSMs where a full or modified retrospective approach is adopted.

The CSM on transition has the potential to create some surprising results, which will need to be explained, particularly for products written back in past decades when the market conditions and underwriting practices were significantly different from those of today.



Presentation and disclosure

Disclosures

The IFRS 17 package of disclosures includes a number of additional requirements beyond those currently required for IFRS 4. Figure 5 below summaries the key requirements. Insurers may find the requirements onerous and require new data processes, such as the detailed opening to closing balance sheet reconciliations for all components and the confidence level disclosures for the risk adjustment. In addition, the new business, expected pattern of recognising the CSM in profit and extent of onerous contracts are likely to be of particular external interest.

Solvency II also created a significant number of private and public reporting and disclosure requirements through the Solvency and Financial Condition Report (SFCR) and Regular Supervisory Report (RSR). In some instances the requirements will overlap with IFRS 17 (for example, around risk disclosures as they do today in current accounting), while in others they will not. It may be possible to bring together some of the reporting requirements of the two metrics. For example, could the Solvency II analysis of change in technical provisions (profit or loss attribution) and claims development tables be used to develop equivalent IFRS disclosures? Automating the production will reduce reporting time frames and save on related costs. In addition, with separate accounting and regulatory reporting requirements, it will be important to explain and reconcile the two balance sheets.

An additional consideration is how best to explain the contrasting presentation in IFRS between insurance contracts (under IFRS 17) and non-participating investment contracts. These contracts can be quite similar in structure (e.g. unit linked) but will be accounted and presented in very different ways in the new world.

Figure 5 – Summary of IFRS 17 disclosure requirements

Amounts

- Opening to closing reconciliations with prescribed components:
  - Liability for remaining coverage, loss component and incurred claims.
  - Fulfilment cash flows, risk adjustment and CSM.
  - Revenue.

  (Splitting out insurance/ reinsurance and asset/liability).
- New business impact on future cash in/out flows, risk adjustment and CSM.

  (Splitting out transfers, business combinations and onerous contracts).
- Quantitative (time bands) or qualitative on expected release of CSM to P&L.
- Certain direct participating contract requirements (e.g. fair value, risk mitigation, other comprehensive income method etc.).

Judgements

- Measurement methods.
- Processes for estimating the inputs.
- Changes in methods and processes.
- Methods used to calculate finance income/expense if OCI option is used.
- Confidence level for risk adjustment measurement.
- Yield curves (discount rates).

Risks

- Nature and extent of risks.
- Exposure.
- Procedures used to manage risks.
- Concentration of risks.
- Insurance and market risk: sensitivity analysis and insurance claims development.
- Credit risk: exposure and reinsurance quality.
- Liquidity risk: maturity analysis by estimated timing of cash flows.
- Impact of regulatory regime.

Transition

Where modified retrospective and fair value approaches adopted:

- CSM and revenue reconciliation (under 'Amounts') separately for each.
- How the transition CSM was determined for each.
- Opening to closing reconciliation (where applicable) of the cumulative OCI for financial assets measured at fair value through OCI relating to the groups of insurance contracts.

Source: PwC analysis based on our current understanding of the final requirements.

Presentation of the balance sheet

IFRS 17 introduces a new level of separation on the balance sheet – the carrying amounts of groups of insurance contracts which are assets should be presented separately from those for groups of insurance contracts which are liabilities, and similarly for reinsurance contracts held. Reporting systems will need to be developed to identify and track groups of contracts for this purpose.

Presentation of the income statement

IFRS 17 prescribes the approach to presenting revenue on the income statement, which will be quite different from today. An 'earned premium' method is to be followed (without exception), where premiums are allocated to each period in proportion to the relative value of the insurance coverage and other services expected to be provided in that period. In addition, the measurement of revenue and expenses on the income statement excludes receipts and payments from certain investment components within contracts (typically expected to be many policyholder account balances). These changes represent substantial differences relative to many current GAAPs for insurers which write long-duration life business, and so will significantly affect data and system requirements. How the volume measures are explained to stakeholders will need to be considered.

There are no equivalent concepts in Solvency II due to its focus on the balance sheet strength rather than performance reporting.

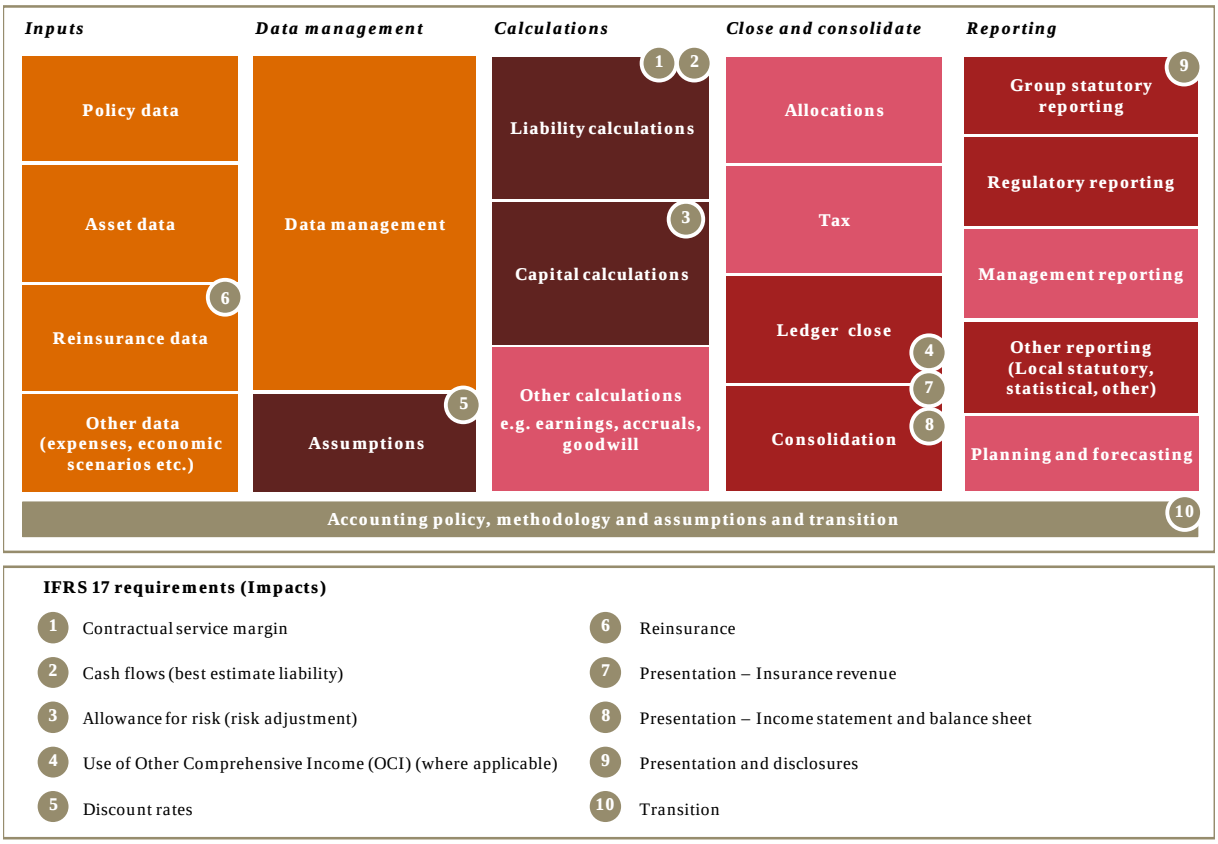
Impact on wider data and system architecture

Overview

So far this publication has focused on a comparison between the Solvency II and IFRS 17 measurement and disclosure requirements. However, the overall operational impacts on data and systems arising from IFRS 17 will be extensive. There may be impacts on extracts from policy administration systems and the construction of data warehouses, through to more granular cash flows in actuarial and other model solutions, and then downstream consequences on ledgers and consolidation tools. In addition, the presentation and disclosure requirements in IFRS 17 will exist in parallel with the accelerating disclosure requirements for Solvency II and other internal or external key performance indicators (KPIs) that insurers may wish to adopt.

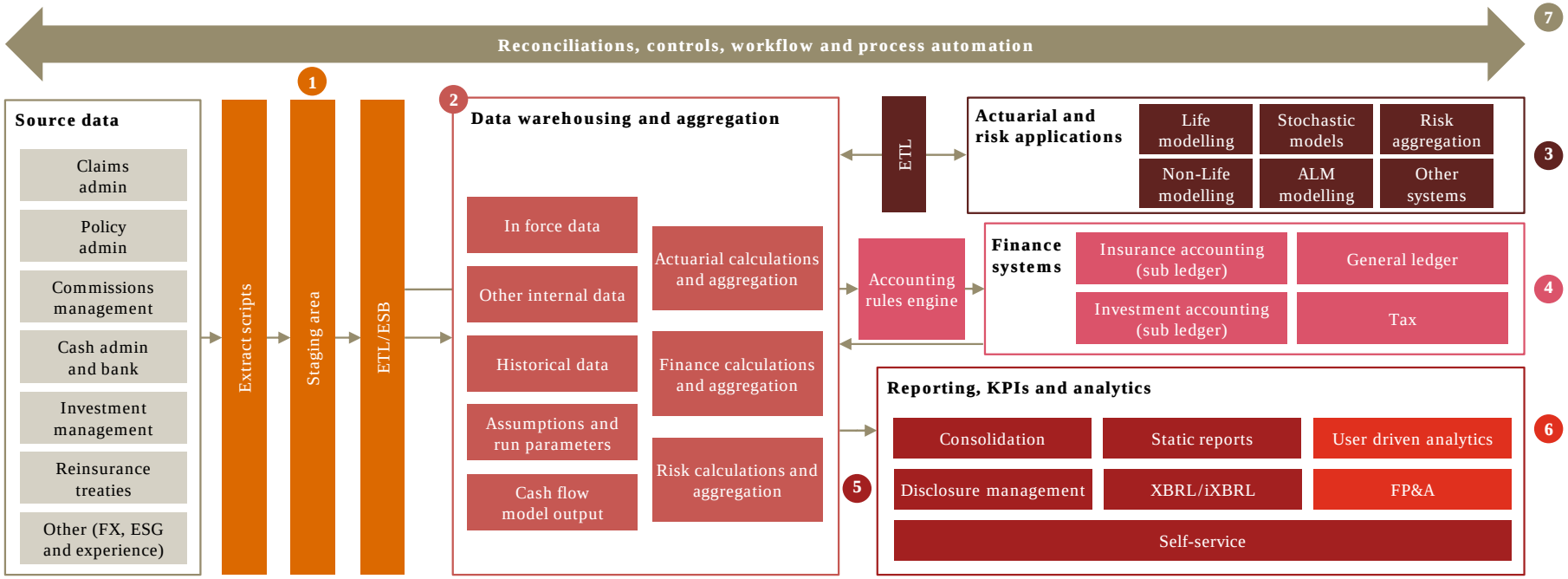
Figures 6 and 7 below illustrate the potential impacts on insurers' data and system architecture arising from IFRS 17.

Figure 6 – Illustrative impact on insurers' data architecture



Source: PwC analysis based on our current understanding of the final requirements.

Figure 7 – Illustrative impact on insurers' system architecture



IFRS 17 requires additional source data which impacts on data integration systems and processes. **1**

Leverage a data warehouse to store actuarial, risk, finance & sales data, perform calculations (potentially CSM) and aggregate for reporting. **2**

Actuarial models will need to produce more granular cash flows, using different assumptions and discount factors. **3**

Accounting rules logic will need to change under IFRS 17 while changes to income statement presentation will impact on the sub-ledger and general ledger. **4**

IFRS 17 impacts on the consolidated chart of accounts, disclosures and will require new KPIs and amendments to external reporting (i.e. analyst packs). **5**

Financial planning and analysis of business performance will change, a choice needs to be taken if IFRS 17 become the basis of managing the business or just a statutory requirement. **6**

IFRS 17 specifies new granular reconciliations. The granularity requirements necessitate greater levels of control and auditability. Accelerated reporting will impact on workflow and automation. **7**

Source: PwC analysis based on our current understanding of the final requirements.

Potential solutions and modernisation

Any overall system and data solution will need to embed strong controls while addressing the likely additional pressure on the financial reporting process under IFRS 17.

Insurers are starting to consider various options to address the IFRS 17 requirements and vendor solutions are in production. The options for insurers range from minimum investment for compliance (by reusing or extending existing system architecture), through targeted or optimised investment, to seeking to modernise the architecture (such as through data lakes, analytics, visualisation, robotics etc.). There is clearly no 'one size fits all' approach as each insurer will have a different data and systems history to assess before deciding on the best approach for them.

That said, we are now starting to see an increase in insurers who are seeking to modernise and innovate to improve their Finance, Actuarial and Risk functions. We are seeing five broad trends being considered or pursued by these functions:

1. Modernisation of Financial Planning, Reporting and Management Information.
2. Modernisation and streamlining of Finance Operations.
3. Modernisation of the Actuarial function including workflow, reporting and analysis.
4. Treating data as an asset, with increased focus on unstructured and external data along with the tools to use this data.
5. Using technology (such as the Cloud, Machine learning, InsureTech and Blockchain) to innovate for an advantage.

IFRS 17 programmes may start to drive focused modernisation investments, typically fuelled by the question 'What does Compliance Plus look like?' However, and surprisingly given the recent investment and disruption caused by Solvency II, in some cases large scale modernisation and innovation investments are being run in parallel to IFRS 17 to achieve lower cost, improve management insight, drive revenue, accelerate reporting, embed stronger and enable teams to be more effective.

We anticipate that modernisation and innovation investment will gather momentum in the coming years as insurers seek a competitive advantage.

Appendices

Appendix A – Insurance contracts and participating investment contracts

Solvency II	IFRS
Relevant standards/sources of information	
• Solvency II Level 1 Directive (Directive 2009/138/EC), as amended by Omnibus II (Directive 2014/51/EU). • Solvency II Level 2 Delegated Regulation (Delegated Regulation (EU) 2015/35, as amended by Delegated Regulation (EU) 2016/467). • Level 3 Guidelines issued by EIOPA during 2015, in particular those on the valuation of technical provisions, contract boundaries and the implementation of the long-term guarantee measures. • Question and answer logs published by EIOPA on the relevant guidelines.	• IFRS 17 *Insurance Contracts* (including Basis for Conclusions and the accompanying Illustrative Examples).
Scope	
• Solvency II was effective from 1 January 2016. • Solvency II applies to all insurance and reinsurance contracts written by insurers in the European Economic Area (EEA) and its group supervision requirements apply to insurance groups containing EEA insurers. In addition certain of Solvency II's requirements apply to contracts written by non-EEA insurers through branches in the EEA. • Solvency II applies to all contracts regulated as insurance. There is no distinction between contracts based on the level of risk transferred, except for determining the cash flows that are within the boundary of a contract as discussed in a subsequent section. There is thus no concept of separating distinct investment components from contracts. • There are scope exclusions for certain undertakings by virtue of their size, legal status, nature or specific services they offer.	• IFRS 17 applies for annual reporting periods beginning on or after 1 January 2021 (with early adoption permitted provided IFRS 9 *Financial Instruments* and IFRS 15 *Revenue from contracts with Customers* are also applied). • IFRS 17 for insurance contracts applies to all contracts issued by an entity which: - **Transfer significant insurance risk** (except for those explicitly excluded, such as certain product warranties and residual value guarantees; certain fixed-fee service contracts; employers' assets and liabilities from employee benefit plans; and financial guarantee contracts that the issuer has not previously asserted that it regards as insurance contracts); or - Do not transfer significant insurance risk, **but are investment contracts with a discretionary participation feature** where the entity also issues insurance contracts. It also applies to reinsurance contracts held by an entity, but not to insurance contracts held by the entity as a policyholder**.** • **The definition of significant insurance risk is largely unchanged from current IFRS 4 *Insurance Contracts*,** with the exception that a contract does not transfer significant insurance risk if there is no scenario that has commercial substance in which the insurer can suffer a loss (on a present value basis). However, reinsurance contracts that do not expose the issuer to the possibility of a significant loss are deemed to transfer significant insurance risk if they transfer substantially all

Solvency II	IFRS
	of the insurance risk on the reinsured portion of the underlying insurance contracts. • Distinct investment components (e.g. certain policyholder account balances), certain embedded derivatives and promises to transfer distinct goods and non-insurance services contained in insurance contracts are separated and measured under the applicable IFRS standards. • It is likely that many investment components will not be distinct due to interactions with the insurance component. The scope of embedded derivatives separated in IFRS 17 may potentially be wider than today as the fixed surrender value exemption in IFRS 4 has been removed. • **The identification of investment contracts and the separation of investment components in IFRS will often result in a significant difference from Solvency II.**
Future cash flows	
Recognition and derecognition • An obligation is initially recognised at the earlier of the date when the insurer or reinsurer becomes party to the contract which gives rise to the obligation and the date when the cover begins. • An obligation is derecognised when it is extinguished, discharged or cancelled or when it expires.	**Recognition and derecognition** • A group of insurance contracts is initially recognised at the earliest of: - when the coverage period begins, - the date when the first payment from a policyholder in the group becomes due, or - when the group becomes onerous. • Any insurance acquisition cash flows (income or expense directly attributable at the portfolio level) incurred before a group is recognised are deferred until recognition. • Investment contracts with a discretionary participation feature are recognised when the insurer becomes a party to the contract. • **There is the potential for different recognition due to the 'first payment' (IFRS) versus 'party to' (Solvency II) condition; and the level of grouping and onerous contract test in IFRS.** • Similar to Solvency II, a contract is derecognised when the contractual obligations are extinguished, discharged, cancelled or expired. An insurer is also required to derecognise an existing contract and recognise a new contract as a result of certain modifications, including if the modification changes whether the contract is in scope of IFRS 17, whether the contract is eligible for the PAA or the group in which the contract is included. **Such a requirement does not exist under Solvency II.**

Solvency II	IFRS
Probability-weighted future cash flows • In Solvency II, the best estimate corresponds to the 'probability-weighted average of future cash flows taking account of the time value of money'. This requires all future scenarios to be considered, which in some circumstances may necessitate the use of stochastic methods, for example when valuing the future discretionary benefits of participating contracts or other contracts with embedded options and guarantees. However, for non-life liabilities and for other life insurance liabilities, the use of stochastic techniques may not be necessary, and deterministic or analytical techniques may be more appropriate. For example, in respect of the valuation of non-life liabilities, deterministic methods (for example chain-ladder methods) will usually be appropriate, providing these are calibrated (or else adjustments made) to target a best estimate. For life insurance liabilities the outcomes for certain risk variables are sufficiently symmetric that a deterministic valuation may suffice. • The calculations are on a policy-by-policy basis although, for practical reasons, grouping and approximations are likely to occur where these can be demonstrated to produce materially the same result, for example, for non-life liabilities or more generally where stochastic methods are adopted. • There is no deposit floor and negative liabilities are permitted. For example, the total liability for a unit linked contract can be below the account balance (unit fund).	**Probability-weighted future cash flows** • In IFRS, the contract liability is measured on the basis of estimates of the future cash inflows and outflows that will arise directly as the insurer fulfils the contracts. These estimates should be explicit and current and should present an unbiased view of expected future values. **The considerations regarding the valuation techniques to be used are similar to Solvency II.** • The considerations over grouping and approximations apply equally under IFRS. • As for Solvency II, there is no deposit floor and negative values of future cash flows are permitted (although may be at least partially offset by the CSM – see relevant section below).
Granularity/grouping of contracts • There is a minimum level of segmentation required when calculating the technical provisions, using defined lines of business. Contracts containing life and non-life risk features are required to be split and there are unbundling requirements between the defined lines of business.	**Granularity/grouping of contracts** • A minimum level of segmentation is defined by the requirement to determine the contractual service margin at the level of groups of insurance contracts. Insurers must identify **portfolios** of insurance contracts (where a portfolio comprises contracts subject to similar risks and managed together), which may require to be further subdivided into groups according to whether or not they are (or may become) onerous and to ensure that a single group does not contain contracts which are issued more than one year apart. • **Further granularity may also be required**, for example due to the specific requirements for investment contracts with a discretionary participation feature, the application of the general versus the variable fee measurement model and the various profit or loss and other comprehensive income presentation models. • **This may result in a significantly more granular tracking of liability movements over time in IFRS 17 than in Solvency II.**

Solvency II	IFRS
Contract boundary • The contract boundary sets the point up to which obligations are recognised on existing business. Within the boundary period, both contractual premiums and benefits arising from policyholder options to review or extend their policy are taken into account on a best estimate basis. Outside the boundary, no further allowance is made for contractual premiums but any obligations arising from premiums already paid are projected to the point at which they are extinguished. • The boundary is set as the point where **the insurer can unilaterally terminate** the contract, **refuse to accept a premium or amend the benefit or premium to fully reflect the risks** (so there is no scenario under which the benefits and expenses payable exceed the premium). • The ability to amend (or re-price) to fully reflect risks is assessed at the level of a portfolio of obligations except for certain life insurance obligations where it is at the contract level (this is in the case where an individual risk assessment was carried out at the inception of the contract and the assessment cannot be repeated before amending the premiums or benefits). • If there is **no material transfer of insurance risk or financial guarantees in the contract**, then any obligations that do not relate to premiums which have already been paid do not belong to the contract, unless the insurer can compel the policyholder to pay the future premium. So effectively, these contracts are treated as being 'paid-up' and embedded profit from future premiums is not included on the Solvency II balance sheet. **The definition of 'material transfer of insurance risk' does not automatically align with the classification of insurance contracts under IFRS 17.** • There is a requirement to **unbundle** contracts into components where the contract boundary definition would differ between parts. This is a different concept to the separation requirements in IFRS.	**Contract boundary** • The boundary is at the point where the contract **no longer confers substantive rights and obligations under which the insurer can compel the policyholder to pay the premiums, or where the insurer no longer has a substantive obligation to provide services to the policyholder**. • **For insurance contracts**, this is considered to be when the insurer is able to fully reassess and re-price the risk attaching to an individual policyholder. There are additional conditions that apply where the reassessment and re-pricing of risk is at the portfolio level. • **For investment contracts with a discretionary participation feature**, this is considered to be when the insurer no longer has a substantive obligation to deliver cash. • The contract boundary should be reassessed each reporting period to take account of any changes in circumstances affecting the insurer's substantive rights and obligations. • **The contract boundary definitions under Solvency II and IFRS are similar but not identical and the cash flows defined as falling within the boundary may therefore differ**. Both definitions permit, under certain conditions, a boundary based on a re-pricing assessment at either the contract or the portfolio level. Insurers will need to look closely at the two definitions across their full range of contracts to assess whether the definitions result in different contract boundaries.
Assumptions underlying the best estimate • Economic assumptions should be consistent with information provided by financial markets. Guidance is provided as to what constitutes deep, liquid and transparent financial market data to be used unadjusted in the valuation and where data does not have these characteristics, how the data should be treated. This is important: - Where insurance liabilities are longer dated than available market data and extrapolation is required, such as in respect of assumptions for equity implied volatilities; or - Where current or historic average data could be applied, such as in respect of equity and swaption implied volatility assumptions; or	**Assumptions underlying the best estimate** • **The approach to market variables in IFRS is similar to Solvency II**. In particular, IFRS specifically states that such variables 'shall be consistent with observable market prices' and the conditions to deviate from observable market data are those set out in IFRS 13 *Fair Value Measurement*. • Similar to Solvency II, an entity-specific approach is required for non-market variables (e.g. non-economic assumptions), and the effects of management actions and policyholder behaviour are required to be included in the expected cash flows.

Solvency II	IFRS
- Where there is no current market data, such as for asset correlation assumptions. • Economic assumptions should also be consistent with the relevant risk-free rate, which is considered in more detail below. • For non-economic assumptions, an entity-specific approach is required, but with reference to external data sources where this is relevant. • The interaction between economic and non-economic variables (for example, persistency dependent on economic conditions), future management actions and policyholder behaviour must be included.	
Scope of cash flows • All cash in-and out-flows required to settle the obligations over the lifetime of the contract are incorporated. • The cash flows are on a going concern basis and there is no allowance for the risk of non-performance by the insurer (own credit risk).	**Scope of cash flows** • All cash flows that the insurer will incur directly as it fulfils the contracts are included. Consistent with Solvency II, the cash flows are on a going concern basis and there is no allowance for own credit risk. • **Many of the cash flows are the same as in Solvency II, for example, regular premiums, benefits, etc. However, there are potential differences, for example relating to expense and participating contract cash flows, as detailed below.**
Expense cash flows • All expenses that will be incurred in servicing all obligations over the lifetime of the contracts, including both overhead expenses and expenses that are directly assignable to individual claims, policies or transactions (for example administration, investment management, claims management, claims handling and acquisition expenses, including commission expected to be incurred in the future) are included. • Overhead expenses include salaries to general managers, auditing costs and regular day-to-day costs (e.g. office rent). They also include expenses related to the development of new insurance and reinsurance business, advertising and improvements to internal processes (e.g. buying new IT systems). Only expenses connected to activities which are not linked to the servicing of insurance contracts (e.g. addressing pension scheme deficits) should be excluded from technical provisions. • Both future expected increases and reductions in costs may be included, but any expected cost reductions should be realistic, objective and based on verifiable data and information. Assumptions for future expense inflation should be consistent with other economic assumptions. • Expense assumptions should consider the availability and relevance of any available market data representative of the portfolio and, for those determined by contracts with third parties, should reflect the terms of those contracts.	**Expense cash flows** • All expenses that relate directly to the fulfilment of the portfolio of insurance contracts are included. Examples of such expenses are claims handling costs, policy administration and maintenance (including recurring commission) costs and costs incurred in providing contractual benefits in kind. • A systematic and rational allocation of directly attributable fixed and variable overheads is also included. Costs that do not relate directly to the portfolio of insurance contracts (such as certain product development and training costs) are excluded. • Costs arising from abnormal amounts of wasted labour or other resources are excluded from the cash flows. • Directly attributable acquisition expenses in acquiring a portfolio of contracts are included in the cash flows and serve to reduce new business strain (implicit deferral through the contractual service margin). • **The scope of expense cash flows is different from Solvency II, specifically acquisition costs and certain non-direct overhead expenses.**

Solvency II	IFRS
Investment return cash flows • Investment return cash flows are not taken into account unless the liability to the policyholder depends on the cash flows, for example participating and certain unit-linked contracts. • When investment return cash flows are required, the selection of the investment return in a stochastic calculation is commonly the 'risk-free' rate ('risk neutral' projection) or an expected asset growth rate ('real world'/'deflator' projection). The selection of the investment return is consistent with the discount rate to provide a 'market consistent' style method. • Where a replicating portfolio of financial instruments exists and meets certain criteria it is used to value the technical provisions as a whole. There is no additional risk margin. Criteria for permitting the use of replicating portfolios are restrictive. The primary example provided is the unit balance on a pure unit-linked contract. There are limited other cases where a replicating portfolio approach is permitted.	**Investment return cash flows** • Consistent with Solvency II, investment return cash flows are not included when the policyholder benefits do not depend on them. • When policyholder benefits do depend on investment return cash flows, this dependency is reflected in the measurement of the contracts. Techniques for reflecting the dependency are noted as including replicating portfolios (although, consistent with Solvency II, there is likely to be limited applicability) or a stochastic method (to capture potential asymmetries) using actual investment cash flows consistent with the discount rate and the measurement of the underlying assets. • There is explicit mention of 'risk neutral' stochastic techniques and techniques that result in options and guarantees *'being consistent with observable market prices (if any) for such options and guarantees'*. **Both IFRS and Solvency II therefore require the use of market consistent approaches.**
Tax cash flows • Only tax payments that are charged to policyholders or that would be required to be made by the undertaking to settle the obligations are included. All other tax payments are included elsewhere on the balance sheet. • Transaction-based taxes and levies that arise directly from existing contracts or can be attributed to the contracts on a reasonable and consistent basis are included.	**Tax cash flows** • As for Solvency II, transaction-based taxes and levies are included. • In addition, payments by the insurer in a fiduciary capacity to meet tax obligations incurred by the policyholder (and related receipts) are included (while other obligations are not).
Discount rate	
• The discount rate is defined as the current risk-free interest rate term structure for each currency. The risk-free rate is defined as: - Basic risk-free curve: Typically a swap yield curve as starting point in developed financial markets, less a deduction for credit default and basis risk. - Plus, depending on circumstances, potentially an additional volatility or matching adjustment to the term structure. **Basic risk-free interest rate structure** • The basic risk-free curve is provided by EIOPA on a monthly basis, for each term, currency and country. • EIOPA is responsible for the methodology used to derive the swap curve, including the approach to extrapolation and the allowance for credit risk, and keeps it under review. Key expert judgments in the extrapolation methodology are the ultimate forward rate, the entry point and the period of convergence.	• The discount rate is required to reflect the characteristics of the cash flows and the liquidity of the contracts and to be consistent with the current observable market prices for instruments with cash flows which reflect the characteristics of the liability (e.g. timing, currency and liquidity). • Unlike the requirements in Solvency II, there is no prescribed method in IFRS for the determination of the discount rate. It can be determined using: - A 'bottom-up' approach, adjusting a risk-free yield curve (typically for an illiquidity premium reflecting the different liquidity characteristics between assets and insurance liabilities); or - A 'top-down' approach, adjusting a yield curve that reflects current market returns on either the actual portfolio of assets held or a reference asset portfolio. Adjustments would be made for credit default risk (both expected default and the associated market risk premium) and an allowance for cash flow mismatches between the assets (actual or reference) and the liabilities. • As IFRS 17 acknowledges, it is unlikely that a top-down and a bottom-up approach will provide the same yield curve in all circumstances.

Solvency II	IFRS
Volatility Adjustment (VA) • The VA is designed to adjust the swap yield curve to reflect the spread in government and corporate bond markets. • The VA is provided by EIOPA on a monthly basis for each currency and country. It is calculated in line with a published methodology, as a percentage of the spread on a reference portfolio of bonds, loans and securitisations. It has no dependence on the characteristics of the entity's assets or liabilities. • The VA cannot be applied to products using a matching adjustment. • Use of the VA may be subject to approval from the local regulator (for example in the UK). **Matching adjustment (MA)** • The MA is designed to reflect the stable characteristics of certain liabilities which permit insurers to be long-term investors and to reduce or eliminate exposure to shorter-term spread movements in assets (while default risk does remain). • The MA is subject to regulatory approval in all jurisdictions. • The MA is calibrated as the yield on the matching assets (actually held) less an allowance for credit default. EIOPA publishes the fundamental spread (reflecting the risks retained by the insurer) for each relevant duration, credit quality and asset class for calculation of the matching adjustment.	• For European-based insurers, the Solvency II basic risk-free curve may be the starting point for the risk-free yield curve in the bottom-up approach. **Insurers will need to assess the appropriateness of judgements in the Solvency II extrapolation methodology** including the entry point, transition period and ultimate forward rate. However, the **Solvency II volatility adjustment is not a feature of the liabilities (or assets that back the liabilities) and is thus unlikely to be appropriate under IFRS 17**. • **A top-down approach is similar in concept to the Solvency II discount rate including matching adjustment** (given the close cash flow matching of the supporting assets to the liabilities in Solvency II)**.** However, insurers will need to consider how a matching adjustment calculated at an aggregated level (commonly across a whole annuity portfolio) is applied in the context of the annual groups in IFRS 17. In addition, insurers will need to assess the calibration of the fundamental spread in view of the IFRS 17 allowances for expected credit default risk and the associated market risk premium. • For both IFRS and Solvency II, the contract liabilities are measured using a current discount rate. In IFRS, changes in the discount rate from that at inception may be presented in other comprehensive income rather than in profit or loss and weighted-average discount rates may be needed due to contracts being recognised on a group basis. Consequently, many discount rate assumption sets will be required in IFRS. **There is no equivalent concept in Solvency II, where only current rates are required.**
Allowance for risk (risk margin/adjustment)	
• Risk margin is calibrated to ensure that the technical provisions are equivalent to the expected amount required by another insurer to take over and meet the obligations. No risk margin is required where the technical provision has been determined as a whole using a replicating portfolio. • The methodology and calibration of the risk margin is prescribed under Solvency II. A cost-of-capital approach is required with a cost-of-capital rate of 6% (above the risk-free rate) specified. • The capital requirement is designed to cover a confidence level of 99.5% over a one-year time horizon and captures underwriting risk, residual market risk (other than interest rate risk), operational risk and certain counterparty default risk. The capital requirements are based on either an approved internal model calibration or the Standard Formula. • An unadjusted risk-free discount rate is used, excluding any allowance for matching adjustment or volatility adjustment. • The risk margin generally reflects the level of diversification of the insurer ('entity level' diversification) and so reflects diversification between lines of business. However, there is no	• The risk adjustment is calibrated as the compensation the insurer requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk. • There is no prescribed technique or limit on the range of techniques; rather, the calculation is principles-based. **In view of Solvency II, European-based insurers may consider adopting a cost-of-capital approach in IFRS, albeit potentially with a different calibration.** A consideration in assessing the approach to adopt will be the level of granularity at which the risk adjustment will need to be tracked in IFRS (which is lower than Solvency II). • Two key components of the cost-of-capital method are the assumed cost rate and the capital amount (that is the confidence level and the capital projection method). **Unlike Solvency II, there is the potential to set different confidence levels and costs for different types of contracts.** • The risk adjustment reflects all non-financial risks associated with the insurance contract. **The range of risks in scope is narrower than under Solvency II.** There is no risk adjustment associated with reinsurer default (non-performance of the reinsurer is considered elsewhere in the model), residual or non-hedgeable market risks (as these are viewed to be captured in the estimation

Solvency II	IFRS
allowance for diversification between life and non-life business within a composite entity, or between different entities within a group. • No allowance is made for the loss-absorbing capacity of deferred tax. • The risk margin is a current measure, which is revised each period and run-off in line with the risk exposure. A single net of reinsurance risk margin is determined.	of market variables in the cash flows) or general operational risk. • There is no prescribed restriction on the level of diversification but rather a principle that the overall risk adjustment reflects the compensation the entity requires to bear the risk. The extent of diversification could therefore be different to Solvency II. • Unlike Solvency II, there is no explicit prohibition on taking into account the loss-absorbing capacity of deferred tax. • The risk adjustment is a current measure, as for Solvency II, which is revised each period in measuring the contract liabilities. **Unlike Solvency II, there are two risk adjustments, relating to the insurance and reinsurance held contract respectively.** • There is a separate requirement to disclose the confidence level to which the risk adjustment corresponds, even if something other than the confidence level technique is adopted. **This will introduce additional complexity compared to Solvency II** and may be a driver for insurers to use a direct confidence interval approach.
Contractual service margin (CSM)	
• No concept of a CSM. • Day-one gains or losses are recognised for all contracts, including reinsurance. • Changes (e.g. experience variances and assumptions) are fully recognised in the period in which they occur.	• The CSM is an addition to insurance contract liabilities, calibrated at inception to an amount that **avoids recognising a gain when an insurer enters into the insurance contract.** A loss at inception is immediately recognised. • **The CSM is determined at the level of a group of contracts, with separate amounts for the gross of reinsurance liabilities and reinsurance held.** The following comments relate to the CSM on gross liabilities; see the reinsurance section below for considerations relating to the CSM on reinsurance held. • The CSM is adjusted ('unlocked') for changes in estimates of future cash flows which relate to future service, with the specific adjustments differing according to whether or not there is a direct participation feature. Where there is no such feature, the adjustments reflect certain experience variances and assumption changes and changes in the risk adjustment; in addition, the CSM accretes interest using the discount rate determined at inception (the 'locked-in' rate). Where there is a direct participation feature, similar adjustments apply in respect of future cash flows that do not vary with returns on the underlying assets; in addition, changes in the entity's share of the underlying items flow through to the CSM, subject to certain restrictions. • The CSM cannot become negative as a result of these adjustments (i.e. it cannot be an asset), although it may be reinstated once eliminated. • The recognition of the CSM in profit or loss in the period reflects the services provided in that period. The release reflects the '*quantity of the benefits provided*' and the '*expected coverage duration*'. There is an exception for investment contracts with discretionary participation features where the CSM is recognised '*in a systematic way that reflects the transfer of investment services*'. • **There will be significant data requirements for the determination the CSM. In particular the requirement to track and monitor separately**

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	changes in the cash flow, risk adjustment and the CSM for the full lifetime of each group of contracts.
Measurement of short-duration contracts (the 'Premium Allocation Approach' under IFRS 17)	
• The fundamental components of the probability-weighted average of future cash flows, discounting and the risk margin apply to short-duration contracts in the same way as other contracts, as discussed above. • For non-life insurance obligations, the best estimate for the **claims provision** and the **premium provision** is carried out separately. • The claims provision relates to claim events already incurred at the valuation date (including incurred but not reported) and comprise all future benefits, expenses and premiums relating to those events. • For the premium provision, the cash flow projections relate to all future claim events falling within the boundary of the contract that will occur after the valuation date. Cash flows include future claim payments in relation to those claims (that is, unexpired risks), future premiums and associated expenses. As cash inflows could exceed the cash outflows, the premium provision can be negative and hence expected future profit is recognised at day one. • A risk margin is required for the total best estimate and there is no requirement to split the risk margin between the claims provision and premium provision. Further, a single net of reinsurance risk margin is determined.	**Liability for remaining coverage ('pre-claims' liability)** • A simplified measurement model, the **Premium Allocation Approach (PAA)**, is permitted (but not required) where either: - the approach would produce a measurement of the liability for remaining coverage that would not differ materially from the one that would be produced by applying the IFRS 17 general measurement model (as set out above); or - the period of cover is one year or less (including cover from premiums within the contract boundary). **This is expected to apply to many non-life contracts and certain short-term life contracts. There is no equivalent option in Solvency II.** • At initial recognition, under the PAA model, the liability is measured using the premium receivable at inception less eligible acquisition costs. • The insurance revenue for the coverage period is either spread evenly over the contract (i.e. based on the passage of time) or based on the expected timing of incurred claims and benefits (i.e. the expected pattern of release of risk), if that pattern differs significantly, for example a portfolio with a high level of US hurricane exposure. • In addition, in relation to the PAA model: - If the insurer elects, the acquisition costs can be expensed as incurred if the coverage period is one year or less. - The time value of money (discounting and interest accretion) should be reflected in the liability, using the locked-in discount rate at inception of the contract, if the contract has a significant financing component. As a practical expedient, discounting and interest accretion is not required if the period between premium receipt and end of coverage is one year or less. • If at any time during the coverage period, facts and circumstances indicate that a group of contracts is onerous, an additional liability is set up. **Liability for incurred claims ('post-claims' liability)** • The liability (incurred whether reported or not) is measured, similarly to Solvency II and the IFRS 17 general measurement model, as the discounted probability-weighted future claim cash flows (with a risk adjustment) related to claim events having occurred before, or at the point of, valuation. • Claims and interest expense reported in profit or loss are determined using the current discount rate, unless the insurer has elected to use other comprehensive income. In that case, claims and interest expense reporting in profit or loss are determined using the locked-in discount rate at the time of the claim event and the difference from the

Solvency II	IFRS
	expense had the current rate been used is reported in other comprehensive income. • However, unlike Solvency II, discounting is not required if the cash flows are expected to be paid or received in one year or less from the date the claims are incurred.
Participating contracts	
• Future discretionary benefits ('participation feature') are benefits, excluding index-linked and unit-linked benefits, with one of the following characteristics: - The amount or timing is at the discretion of the insurer; or - The benefits are legally or contractually based on one or more of the following results: (i) the performance of a specified group of contracts or a specified type of contract or a single contract; (ii) realised or unrealised investment returns on a specified pool of assets held by the insurer; or (iii) the profit or loss of the insurer or fund that issued the contract. • The best estimate includes all future discretionary benefit cash flows, **except those relating to surplus funds where this has been authorised under national law** (which possess the characteristics of Tier 1 basic own funds). • A 'market consistent' stochastic valuation is likely in most cases to value financial options and guarantees due to the dependency of the policyholder benefits on future investment return through the participation feature. Future management actions and policyholder behaviour are included in the assessment.	• The definition of a discretionary participation feature is unchanged from current IFRS 4 *Insurance Contracts* **and is consistent with the equivalent definition in Solvency II.** All contracts with a discretionary participation feature (no matter whether the contract has significant insurance risk or not) are in the scope of IFRS 17 (provided the entity does also issue insurance contracts). • Consistent with Solvency II, a market consistent stochastic valuation of financial options and guarantees will be required in most cases. • The measurement of the liability should **include all payments that result from the contract (both guaranteed and discretionary), including expected future participations whether they are paid to current or future policyholders.** There is no equivalent reference in Solvency II. • The IFRS treatment of residual assets in a participating fund and the allocation between liability and equity will depend on the specific nature of the contracts and national law. • There are a number of areas where IFRS 17 practices may develop over the period until the standard is effective (where there are no equivalent considerations in Solvency II), for example: - The modelling of interactions between groups of contracts, as typically policyholder participations occur at a higher level of aggregation. - The interaction between CSM and equity for mutual insurers.
Reinsurance held	
• Reinsurance recoveries are in general recognised and measured as for the gross cash flows, including using contract boundaries which are consistent with those of the underlying insurance contract, and then presented as a separate asset on the balance sheet. • The reinsurance-related cash flows include the risk of expected reinsurer counterparty default. Cash flows are based on an assessment of the probability of default of the counterparty and the resulting average loss ('loss-given-default' approach). • There is only a single net of reinsurance risk margin on the balance sheet, which includes reinsurer credit risk. • There is no concept of a CSM.	• As for Solvency II, reinsurance recoveries are recognised, measured and presented separately. • Recognition requirements for reinsurance held depend on whether or not losses are covered on a proportionate basis and are modified compared to those used to assess the underlying insurance contract. Recognition could be different to Solvency II. • The reinsurance-related cash flows are calculated on an expected present value basis of the future cash in and out flows. The risk of non-performance by the reinsurer is reflected in the future cash flows. In addition, **there is an explicit reinsurance-related risk adjustment (unlike Solvency II where the risk margin is assessed on a net basis).** • Instead of recognising a day one gain on entering into a reinsurance contract, a reinsurance CSM is held to defer the gain. In the case of a loss it is either recognised immediately (if the contract is for past events) or spread over the coverage period (if it relates to future events).

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	After day one there are specific reinsurance-related requirements on unlocking the CSM on reinsurance contracts held, including to mirror in certain circumstances the unlocking of the CSM on the underlying insurance contracts. • The premium allocation approach may be applied to reinsurance held which meets similar conditions in respect of duration or comparability to the general measurement model. The conditions are assessed separately for the insurance contract and the reinsurance held.
Business combinations and portfolio transfers	
• There is no concept in Solvency II of business combinations or portfolio transfers. All contracts are treated as if written within the current entity and follow the same recognition, measurement and presentation approach.	• For insurance contracts acquired in a portfolio transfer or business combination, the CSM of the insurance contract is calibrated to be the excess of the consideration received (portfolio transfer) or fair value (business combination) over the best estimate plus risk adjustment. If best estimate plus risk adjustment is greater than the consideration received or fair value, then a loss is recognised or goodwill is increased respectively. In assessing the fair value, the deposit floor (a surrender value) as required in IFRS 13 does not apply. • As a consequence, for acquired claims liabilities (unlike direct business), a CSM may exist.
Transitional arrangements	
• There are two main transitional arrangements available to insurers calculating liabilities under Solvency II. These are for the risk-free rate (life business only) and the level of technical provisions. Both transitional arrangements are subject to supervisory approval and ongoing governance arrangements and apply over a 16-year period from 1 January 2016. • Transitional measure on risk-free interest rates: Insurers can gradually introduce the impact of moving from the Solvency I asset-based discount rate for insurance liabilities to the Solvency II discount rate over a period of 16 years. • Transitional measure on technical provisions: Insurers can apply this transitional measure to offset the initial increase in net technical provisions on Solvency II implementation, introducing the increase over a period of 16 years. • The two transitional measures may not be applied to the same business. The transitional measure on technical provisions may be combined with either the matching adjustment or the volatility adjustment but the transitional measure on interest rates may not be applied to blocks of business which have a matching adjustment.	• **IFRS 17 should be applied retrospectively.** This requires an entity to identify, recognise and measure each group of contracts (including the CSM) at the transition date as if the standard had always applied, with the exception of groups of contracts for which it is 'impracticable'. • Where this is impracticable, a 'modified retrospective' or 'fair value' approach is applied at transition. When adopting the modified retrospective approach, there is a series of permitted modifications to the full retrospective approach across four areas in determining the CSM, each of which may be used only to the extent that there is insufficient information to apply a fully retrospective calculation. • In the fair value approach, the CSM is assessed as the difference between the fair value of a group of contracts and the fulfilment cash flows at the date of transition. **There is a range of potential reference points for measuring the fair value**, for example external transactions, reinsurance arrangements or other reporting metrics, such as embedded value or the Solvency II technical provisions, with certain adjustments to reflect a market participant view.
Other matters	
Not applicable.	The following other matter is noted: For unit-linked insurance contracts, an insurer may recognise treasury shares and owner-occupied property at fair value through profit or loss to eliminate an accounting mismatch.

Appendix B – Non-participating investment contracts

Solvency II	IFRS
Relevant standards/sources of information	
• As for Appendix A – Insurance contracts.	• IAS 32 *Financial Instruments: Presentation.* • IAS 36 *Impairment of assets.* • IAS 38 *Intangible assets.* • IFRS 13 *Fair Value Measurement.* • IFRS 9 *Financial Instruments.* • IFRS 15 *Revenue from Contracts with Customers.* • Matters as for insurance contracts (in defining the scope of insurance contracts and therefore implicitly the scope of investment contracts).
Scope	
• Solvency II applies to all insurance and reinsurance contracts written by EEA insurers and its group supervision requirements apply to insurance groups containing EEA insurers. In addition, certain of Solvency II's requirements apply to contracts written by non-EEA insurers through branches in the EEA. There is no distinction between insurance and investment contracts except for determining the cash flows that are within the boundary of a contract as discussed in Appendix A. • There are scope exclusions for certain undertakings by virtue of their size, legal status, nature or specific services they offer.	• Contracts not transferring significant insurance risk are commonly known as investment contracts. • Investment contracts are usually separated into an investment management service component (measured in accordance with IFRS 15) and a financial instrument component (measured in accordance with IFRS 9). Distinct investment components and embedded derivatives unbundled from insurance contracts are also measured in accordance with IFRS 9 (and IFRS 15 where relevant). • Investment contracts issued by insurers containing a discretionary participation feature are within the scope of IFRS 17.
Measurement approach	
• The same recognition and measurement principles apply for insurance and investment contracts in Solvency II. • Unless full replication is possible, the technical provisions are the probability-weighted average of future cash flows taking account of the time value of money plus a risk margin as for insurance contracts. • Most investment contracts are treated as being premium paid-up as a result of the contract boundary definition. However, some insurers in certain territories have agreed with their supervisor that the presence of a cap on the charges taken from funds is sufficient justification for including future premiums within the contract boundary.	• All financial liabilities are measured initially at fair value. Subsequent measurement is either at fair value (typically for unit-linked contracts) or amortised cost using the effective interest method (typically for guaranteed non-linked and non-participating investment contracts). • Further, for those contracts measured at fair value there is a deposit floor (a surrender value). A deposit floor means that the fair value of a financial liability is not less than the net present value of the amount payable on demand. • For contracts measured at fair value, currently the bid value of units is used for typical unit-linked contracts. **IFRS 13 on fair value measurement does not preclude the use of mid-market pricing or other pricing conventions used by market participants as a practical expedient for fair value measurements within a bid-ask spread.**

Solvency II	IFRS
• There is no deposit floor. For example, the total liability for a unit linked contract can be below the account balance (unit fund).	• For contracts measured at amortised cost, any embedded derivatives are separated and valued at fair value if the separate instrument meets the definition of a derivative and the characteristics are not closely related to the host contract.
Profit recognition	
There is no concept of deferring revenue to match the provision of services. Any day-one gain or loss is recognised at inception.	Under IFRS 9, any gain or loss on initial recognition of the financial instrument component can only be recognised immediately where the fair value is determined based upon observable market data; otherwise, it is deferred and earned over the lifetime of the instrument. For the investment management service component, profit is recognised as services are provided: **Deferral of acquisition costs** • IFRS 15 requires an entity to recognise an asset for the direct incremental costs of obtaining a contract with a customer if it expects to recover those costs. The asset is amortised on a systematic basis consistent with the pattern of transfer of the goods and services. **The definition of deferrable acquisition costs for investment contracts continues to be narrower than for insurance contracts and consequently results in higher expected new business strain for these contracts, all else being equal.** • In addition, the deferral of acquisition costs for investment contracts is as an explicit asset rather than 'implicit' deferral through the CSM. • Deferred acquisition cost assets (net of related deferred origination fee liabilities) are assessed for impairment under IAS 36. The recoverable amounts include an allowance for risk and **there is the potential to use Solvency II technical provision methods (with contract boundary restrictions removed) in assessing the recoverable amount.** **Deferral of origination fees** • IFRS 9 application guidance clarifies that an entity should continue to distinguish fees and costs that are an integral part of the effective interest rate for the financial liability from origination fees and transaction costs relating to the right to provide services, such as investment management services. Origination fees relating to investment management services are accounted for within IFRS 15. As such, fees are deferred and earned as services are provided, for example, over the expected term of the policy. **Acquired value of in force** • For investment contracts acquired in a business combination, an Acquired Value of In Force (AVIF) asset is established and there is no deferral of the acquisition costs and origination fees relating to the initial writing of the contracts. The AVIF represents the value in the acquired investment management service component and is amortised on the basis of the expected pattern of consumption of the expected future economic benefits embodied in the asset (under IAS 38). The AVIF is assessed for impairment under IAS 36 (similar to deferred acquisition cost assets above).

Solvency II	IFRS
Other matters	
There is no allowance for the risk of non-performance by the insurer (own credit risk).	The following other matters are noted: • Where investment contract liabilities are held at fair value under IFRS 9 (via the fair value option), the portion of the change in fair value due to changes in own credit is recorded in Other Comprehensive Income, unless that would create or enlarge an accounting mismatch in profit or loss. This is expected to be relevant only in a limited number of cases (certain non-linked investment contracts and embedded derivatives). • The option for insurance contracts to recognise treasury shares and owner-occupied property at fair value through profit or loss to eliminate an accounting mismatch does not apply to unit-linked investment contracts.

Contacts

PwC is helping a range of insurers to assess the implications and address the practical challenges of preparing for IFRS 17. If you would like to discuss any of the issues raised in this paper or other aspects of the frameworks, please speak to your regular PwC contact or one of the following:

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