



# In the Spotlight

## Minimising accounting mismatches relating to financial risk for insurers

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### Tools in the IFRS toolbox for minimising accounting mismatches

#### At a glance

IFRS 17, 'Insurance Contracts' will bring significant changes to how insurers account for the insurance contracts that they issue. For many insurers, IFRS 9, 'Financial Instruments' will also bring changes to the accounting for assets held to back the obligations arising from insurance contracts. In some cases, the interaction of IFRS 9 and IFRS 17 might give rise to accounting mismatches between how insurance contracts and the assets held to back them are recognised and measured. This publication considers how these mismatches can be minimised by using the choices available within IFRS 9 and IFRS 17 where insurers use financial assets within the scope of IFRS 9 to mitigate such financial risks, including by applying hedge accounting. It also explores how hedge accounting could be applied, in practice, to common hedging strategies used by insurers.

#### 1. Background

As insurers implementing IFRS 17 turn their attention to the interaction between insurance contracts and the assets that they hold to back those insurance contracts, they are considering how to address possible accounting mismatches that might arise when those assets are accounted for applying IFRS 9 (or, for hedge accounting, the requirements in IAS 39, 'Financial Instruments').

## 1.1 Accounting mismatches and economic mismatches

To the extent that an insurer holds assets for which the cash flows to be received are expected to match the cash flows to be paid to the policyholder, the insurer has an economic hedge. However, changes in economic variables might affect the assets that an insurer holds to fulfil insurance contracts differently from how they affect the obligations created by the insurance contracts. This difference creates an economic mismatch for the insurer.

Many insurers undertake hedging strategies to reduce the effects of economic mismatches. Most commonly, those strategies focus on mitigating the effect of interest rate risk by using derivatives or other financial instruments, such as government bonds or financial options.

However, even where economic mismatches are fully mitigated, potential accounting mismatches can arise because the recognition or measurement model for financial instruments used to mitigate risks differs from the measurement model for insurance contracts. An accounting mismatch arises where changes in a risk result in gains and losses on two items that are not recognised or measured consistently, so that the extent of the economic offset between an asset and a liability is not reflected in the accounting outcome. The sources of potential accounting mismatches are described in Section 2 below.

## 1.2 Mitigating accounting mismatches

Today, insurers apply IFRS 4, 'Insurance contracts', a standard that allows insurers to use a wide variety of accounting practices for insurance contracts, reflecting national accounting requirements and variations of those requirements. The national accounting requirements were designed to cater for the specific products available in each jurisdiction. Those accounting requirements might have evolved to avoid specific accounting mismatches in those products. In addition, insurers applying IFRS 4 have been able to mitigate potential accounting mismatches in a variety of ways - for example, using shadow accounting<sup>1</sup> or selective unbundling permitted under IFRS 4. However, the introduction of IFRS 17 means that some of the approaches that insurers currently use to avoid accounting mismatches are no longer permitted. Furthermore, different mismatches might arise depending on whether the general measurement model or the variable fee approach is applied under IFRS 17.

Some suggest that, without the application of an appropriate hedge accounting solution, the financial statement volatility arising from accounting mismatches, particularly in the general measurement model, would not faithfully represent the economics of transactions that the insurer undertakes as part of its risk management strategies. They suggest that those accounting mismatches would impair the ability of IFRS 17 to deliver consistent and understandable financial reporting. As a result, there is interest in the extent to which an insurer could reduce the accounting mismatches that might arise where an insurer mitigates economic mismatches using financial instruments within the scope of IFRS 9. For contracts to which an insurer applies the variable fee approach, many accounting mismatches can be avoided using tools available in IFRS 17 (see Section 5 below). However, for contracts to which an entity applies the general measurement model, some of these tools do not apply, and so insurers need to consider whether approaches such as hedge accounting available in IFRS 9 could be used to reduce accounting mismatches.

In addition to the requirements for hedge accounting in IFRS 9, IFRS 9 also permits entities to continue applying the hedge accounting requirements in IAS 39. An overview of hedge accounting is provided in Section 3 below. Section 4 then explores in more detail the application of hedge accounting to some of the hedging strategies commonly undertaken by insurers.

Apart from hedge accounting, IFRS 17 and IFRS 9 contain other measurement options that can be used to minimise accounting mismatches. These are covered in Section 5.

Many insurers have little experience with the hedge accounting requirements of IFRS 9 or IAS 39, and they have not previously considered the detailed requirements in those standards. Most insurers that engage in economic hedging activities today do so for the purpose of managing solvency, regulatory and capital

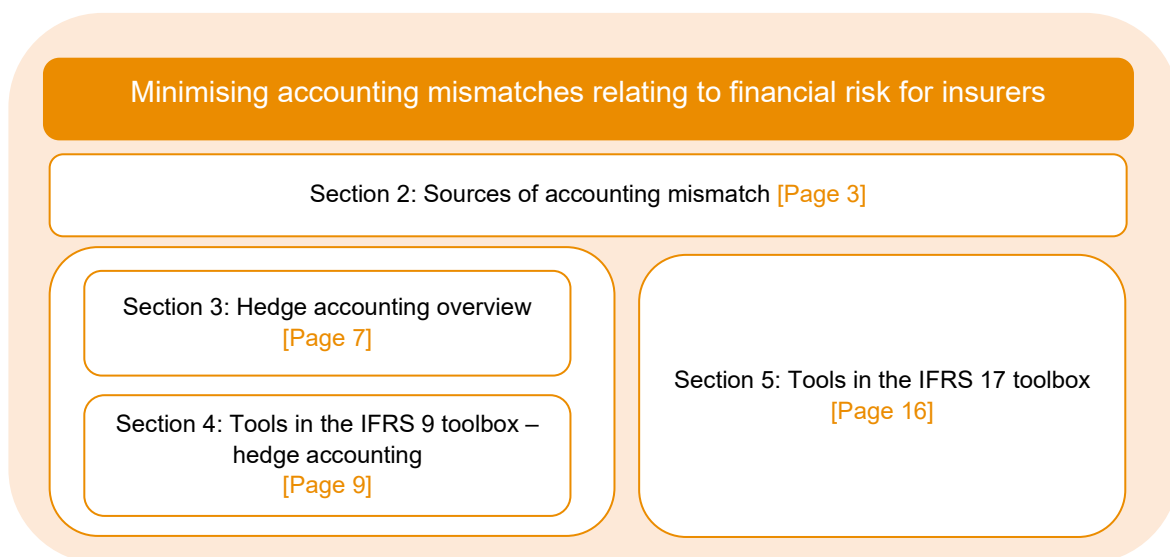
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<sup>1</sup> Shadow accounting is a practice permitted by IFRS 4 to adjust insurance contract liabilities to reduce accounting mismatches that could arise when unrealised gains and losses on assets held by a company are recognised in the financial statements but corresponding changes in the measurement of insurance contract liabilities are not.

requirements. Such requirements are typically targeted at particular asset/liability risks (for example, duration mismatch, financial options and guarantees) or to address entity-wide risk exposures. As a result, insurers do not have the documentation, processes or accounting systems in place to achieve hedge accounting applying IFRS 9 or IAS 39. This publication is intended to help insurers to evaluate the extent to which accounting approaches such as hedge accounting could be used to mitigate any accounting mismatches arising from the interaction of IFRS 17 and IFRS 9.

*Other than where indicated, this publication refers to IFRS Standards as issued by the IASB. The strategies and solutions set out in this publication are not exhaustive. They do not illustrate all of the ways to achieve hedge accounting; nor do they answer all of the questions that might arise in practice.*

### What's inside this Spotlight?



## 2. Sources of accounting mismatch

### **PwC Observations: Mismatches might arise due to differences in accounting for insurance contracts and accounting for financial instruments**

- Applying IFRS 17, the effects of changes in financial risks, including the effect of changes in interest rates, differ depending on whether the general measurement model or the variable fee approach is applied. Applying the general measurement model, the effects of changes in financial risk are recognised as insurance finance income or expenses in the period in which the change occurs. IFRS 17 permits entities an accounting policy choice to recognise insurance finance income or expenses for insurance contracts in profit or loss, or partly in profit or loss and partly in other comprehensive income ('OCI'). Applying the variable fee approach for contracts with direct participation features, some effects of changes in financial risk might adjust the contractual service margin.
- The assets that an insurer holds would generally be accounted for applying IFRS 9, which specifies different measurement models depending on the characteristics of the cash flows and the business model in which the assets are held. For such financial instruments, and in the absence of hedge accounting, accounting mismatches could arise regardless of which accounting policy the insurer chooses under IFRS 17 for insurance finance income or expenses:
  - If the financial instruments are measured at fair value through profit or loss ('FVPL') under IFRS 9, accounting mismatches could arise if changes in insurance finance income or expense are recognised partly in profit or loss and partly in OCI.
  - If the financial instruments are measured at fair value through other comprehensive income ('FVOCI') under IFRS 9, accounting mismatches could arise if changes in insurance finance income or expense are recognised in profit or loss. Accounting mismatches could also arise if changes in insurance finance income or expense are recognised partly in profit or loss and partly

in OCI, because of differences in the timing of recognition of gains and losses in profit or loss. For example, if an insurer holds bonds at FVOCI with cash flows that exactly match insurance contracts entered into on the same day, an accounting mismatch would arise if the bond was sold and immediately reinvested, thus realising a gain or loss on the bond. This is because the realised gain or loss on the sale of the asset is recognised in profit or loss, but the sale has no effect on the amount recognised in profit or loss for the insurance contract liability.

- If the financial instruments are measured at amortised cost under IFRS 9, then the same mismatches in profit or loss could arise as when the bonds are measured at FVOCI. In addition, an accounting mismatch would arise in OCI and equity.
- In most cases, insurers will use a combination of different types of financial instruments to hedge the financial risk, and the accounting effect of changes in interest rates on those financial instruments might vary.

The following table shows where the different accounting models specified in IFRS 9 and IFRS 17 can give rise to accounting mismatches. In each of the examples in the table, there is a partial or complete economic offset between the effect of the change in the financial market variables (in particular, interest rates) on the financial instruments held and the effect of the same change on the insurance contracts issued. An accounting mismatch arises when the extent of that economic offset is not reflected in the accounting outcome.

Source of risk	Risk mitigation activity
<p><b>2.1 Differences in cash flows expected to be received and cash flows expected to be paid</b></p> <p>Insurance contracts result in expected cash outflows that an insurer will be required to meet. The amount of the cash outflows is subject to the risk of changes in insurance risks (such as mortality or longevity) and in lapse rates by policyholders. If the cash flows do not depend on changes in interest rates, the amount that the insurer is expected to pay is not subject to cash flow interest rate risk, but it would be subject to fair value risk due to interest rate changes.</p>	<p>To meet the obligation to pay the expected cash flows, an insurer might hold fixed rate bonds whose contractual cash inflows match the expected cash outflows from the group of insurance contracts.</p> <p>Changes in the fair value of those bonds arising from changes in interest rates would economically offset, partially or completely, any effect of changes in interest rates on the group of insurance contracts. Applying the general measurement model, the effect of changes in interest rates would be recognised as insurance finance income or expenses, and the insurer has the accounting policy choice to recognise that effect in profit or loss, or partly in profit or loss and partly in OCI. Applying the variable fee approach, the effect of changes in interest rates on the underlying items is similarly recognised as insurance finance income or expenses, and the insurer has the accounting policy choice to offset, in profit or loss, an amount that eliminates accounting mismatches with income or expenses included in profit or loss on the underlying items held. In addition, changes in the entity's share of the underlying items adjust the contractual service margin.</p> <p>Applying IFRS 9, the fixed rate bonds could be measured at FVPL, FVOCI or amortised cost, depending on the characteristics of the cash flows and the business model in which the bonds are held.</p>

	<p>Accounting mismatches could arise where the insurer applies the general measurement model, regardless of which accounting policy for insurance finance income or expenses the insurer chooses, depending on how the insurer measures the bonds:</p> <ul style="list-style-type: none"> <li>• If the fixed rate bonds are measured at FVPL under IFRS 9, accounting mismatches could arise if changes in insurance finance income or expense are recognised partly in profit or loss and partly in OCI.</li> <li>• If the fixed rate bonds are measured at FVOCI under IFRS 9, accounting mismatches could arise if changes in insurance finance income or expense are recognised in profit or loss or partly in profit or loss and partly in OCI.</li> <li>• If the bonds are measured at amortised cost under IFRS 9, the same mismatches in profit or loss could arise as when the bonds are measured at FVOCI. In addition, an accounting mismatch would arise in OCI and equity.</li> </ul> <p>Accounting mismatches could also arise in the variable fee approach if the contractual service margin is adjusted for the effect of changes in interest rates on cash flows that do not vary based on the returns on underlying items.</p>
<p><b>2.2 Duration mismatches</b></p> <p>There can be a difference between the duration of the promise made to the policyholder under an insurance contract and the duration of any investments held to back that promise, particularly where the obligations from the insurance contracts extend many years into the future. There is limited availability of assets that match the long durations of those insurance contracts, and so insurers invest in assets of a shorter duration with a view to reinvesting the proceeds at maturity in new assets. This difference in duration exposes the insurer to interest rate risk, arising from the uncertainty of the rate at which the insurer will be able to reinvest the proceeds from the investments when they mature.</p>	<p>To protect against (or minimise) interest rate risk, an insurer could purchase a financial instrument (for example, a forward starting interest rate swap) that exchanges the uncertain future rate at the time of reinvestment for a fixed future rate. Changes in the value of the instrument arising from changes in interest rates would, in economic terms, partially offset the effect of changes in interest rates on the measurement of the insurance contract.</p> <p>Such financial instruments would generally be measured at FVPL under IFRS 9.</p> <p>Accounting mismatches could arise, where the insurer applies the general measurement model, if changes in insurance finance income or expense are recognised partly in profit or loss and partly in OCI.</p> <p>Accounting mismatches could also arise in the variable fee approach if the contractual service margin is adjusted for the effect of changes in interest rates on cash flows that do not vary based on the returns on underlying items and the entity does not apply the risk mitigation option.</p>

### 2.3 Regular premiums

Interest rate risk might arise if the policyholder pays premiums on a regular (such as monthly) basis over the life of an insurance contract, rather than paying a single premium at the beginning of the contract. At any point in time, the insurer would not yet have received all of the expected premiums, and consequently would not yet have the funds available to invest in assets. The insurer has the risk that the rates available when the premiums are received will be different from those when the premium and benefits promised under the insurance contract were set, similar to that arising for duration mismatches.

To protect against (or minimise) the uncertainty of the rate at which the insurer will be able to invest the premiums when received, the insurer might purchase an instrument (for example, a forward starting swap) that exchanges the uncertain future rate for a fixed future rate. Changes in the value of the instrument arising from changes in interest rates would, in economic terms, partially offset the effect of changes in interest rates on the measurement of the insurance contract.

Such financial instruments would generally be measured at FVPL under IFRS 9.

Accounting mismatches could arise, where the insurer applies the general measurement model, if changes in insurance finance income or expense are recognised partly in profit or loss and partly in OCI.

Accounting mismatches could also arise in the variable fee approach if the contractual service margin is adjusted for the effect of changes in interest rates on cash flows that do not vary based on the returns on underlying items and the entity does not apply the risk mitigation option.

### 2.4 Financial guarantees

Some insurance contracts contain financial guarantees that promise to pay the policyholder at least a minimum return, regardless of the return from the assets that the insurer invests in. A minimum return could also be present, for example, through principal protection or the promise of a fixed amount. This guarantee causes an economic mismatch between the obligation created by the insurance contract and the assets that the insurer holds, if those assets do not have a similar embedded guarantee. The insurer is exposed to the risk that the assets might perform below the guaranteed minimum return that the insurer will need to pay to the policyholder.

To protect against (or minimise) that risk, an insurer could purchase an instrument (for example an option) that would result in the insurer receiving the guaranteed amount if the assets perform below the guaranteed level. Changes in the value of the instrument could, in economic terms, partially or completely, offset any changes in the value of the guarantee included in the insurance contract.

Such financial instruments would generally be measured at FVPL under IFRS 9.

Accounting mismatches could arise, where the insurer applies the general measurement model, if changes in insurance finance income or expense are recognised partly in profit or loss and partly in OCI.

Accounting mismatches could also arise, where the insurer applies the variable fee approach, to the extent that the effect of changes in interest rates adjusts the contractual service margin and the entity does not apply the risk mitigation option to recognise these changes directly in the profit or loss to offset the fair value change of the derivative (see Section 5 below).

### 3. Hedge accounting overview

#### 3.1 What is hedge accounting?

The objective of hedge accounting is to represent, in the financial statements, the effect of some types of risk management activities. In particular, hedge accounting was developed to accommodate an entity undertaking hedging strategies using financial instruments to mitigate particular risk exposures that could affect profit or loss or OCI. In simple terms, hedge accounting is a method of accounting that eliminates some types of accounting mismatches. It does this by modifying the normal basis for recognising gains and losses (or income and expenses) on associated hedging instruments and hedged items, so that both are recognised in profit or loss (or OCI) in the same accounting period. This is a matching concept that eliminates or reduces the volatility in profit or loss (or OCI) that otherwise would arise.

##### **PwC Observations: Hedge accounting comes at a cost**

- Hedge accounting is optional, and management should consider the costs and benefits when deciding whether to use it.
- Hedge accounting is an exception from normal accounting principles. Therefore, there are restrictions in both IFRS 9 and IAS 39 for determining when an entity can apply hedge accounting and whether a proposed hedging relationship qualifies for hedge accounting. Those restrictions include:
  - Formal designation and documentation of the risk management objective and strategy, the hedging instrument and hedged item and the nature of risk being hedged.
  - Meeting qualifying criteria for the hedging instrument and hedged item.
  - Demonstrating hedge effectiveness and measuring ineffectiveness. Hedge effectiveness is defined as the extent to which changes in the fair value or cash flows of the hedging instrument offset changes in the fair value or cash flows of the hedged item. Specific hedge effectiveness tests, including prospective and retrospective tests, need to be met before an entity can apply hedge accounting.

There are two hedge accounting models that might be applicable to insurers who mitigate risks in insurance contracts using financial instruments: cash flow hedge accounting; and fair value hedge accounting.

##### **3.1.1 Cash flow hedge accounting**

A cash flow hedge is a hedge of the exposure to variability in cash flows that could affect profit or loss, and that is attributable to a particular risk associated with a recognised asset or liability, an unrecognised firm commitment (currency risk only) or a highly probable forecast transaction. Future cash flows might relate to existing assets and liabilities, such as future interest payments or receipts on floating rate debt. Future cash flows might also relate to a highly probable forecast transaction, such as a highly probable forecast reinvestment of existing assets when they mature. Volatility in future cash flows might result from changes in variables such as interest rates, exchange rates, equity prices or commodity prices.

Provided that the cash flow hedge is effective, changes in the fair value of the hedging instrument are initially recognised in OCI. The ineffective portion of the change in the fair value of the hedging instrument (if any) is recognised directly in profit or loss.

The amount recognised in OCI is the lower of:

- the cumulative change in the fair value of the hedging instrument from the inception of the hedge, and
- the cumulative change in the fair value (present value) of the expected cash flows on the hedged item from the inception of the hedge.

For cash flow hedges of a forecast transaction which result in the recognition of a financial asset or liability, the accumulated gains and losses recorded in equity should be reclassified to profit or loss in the same period or periods during which the hedged expected future cash flows affect profit or loss. Where there is a cumulative loss on the hedging instrument and it is no longer expected that the loss will be recovered, it must be immediately recognised in profit or loss.

### 3.1.2 Fair value hedge accounting

A fair value hedge is a hedge of exposure to a change in the fair value of an asset or liability or an unrecognised firm commitment that could affect profit or loss (or, for a hedge of an equity investment measured at FVOCI, OCI), and that is attributable to a particular risk. Changes in fair value might arise through changes in variables such as interest rates (for fixed-rate loans), foreign exchange rates, equity prices or commodity prices.

The carrying value of the hedged item (that is, the insurance contract) is adjusted for fair value changes attributable to the risk being hedged, and those fair value changes are recognised in profit or loss (or, for a hedge of an equity investment measured at FVOCI, OCI). The hedging instrument (that is, the financial instrument) is measured at fair value, with changes in fair value also recognised in profit or loss (or, for a hedge of an equity investment measured at FVOCI, OCI).

#### **PwC Observations: Proxy hedging can be used**

- While the objective of hedge accounting in IFRS 9 is to represent the effect of an entity's risk management activities in financial statements, in some cases an entity need not designate hedging relationships that exactly mirror its risk management activities. Instead, an entity can designate so-called proxy hedges (that is, designations that do not exactly represent the actual risk management). IFRS 9 permits proxy hedging, provided that the designation is 'directionally consistent' with the actual risk management activities. An entity can use proxy hedging to reflect the availability of suitable instruments. Examples of proxy hedges include:
  - designating a gross amount of an exposure, where risks are managed based on net exposures;
  - designating, as the hedged item, variable-rate debt instruments held in cash flows hedges while managing the interest rate risk of pre-payable fixed-rate debt instruments issued or deposits; or
  - designating, as the hedged item, fixed-rate debt instruments held in fair value hedges while managing the interest rate risk of variable-rate debt instruments issued.

### 3.2 Applicable standards

Insurers applying IFRS 17 will apply IFRS 9 to the financial instruments that they hold to back the obligations that arise from insurance contracts. Applying IFRS 9, and provided that the conditions for hedge accounting are met, an entity can use hedge accounting to minimise potential accounting mismatches. IFRS 9 also permits entities to continue applying the hedge accounting requirements in IAS 39 if, when an entity first applies IFRS 9, it chooses to apply the hedge accounting requirements of IAS 39 to all of its hedging relationships. Regardless of whether an entity chooses to apply IFRS 9 or IAS 39 hedge accounting, it can still apply IAS 39's specific requirements for macro fair value hedge accounting for interest rate hedges<sup>2</sup>.

A summary of the differences between the hedge accounting approaches in IFRS 9 and IAS 39 can be found in our December 2017 publication [Achieving hedge accounting in practice under IFRS 9](#). The hedge accounting approaches in IFRS 9 and IAS 39 are also described in Section 4 below.

#### **PwC Observations: Which standard - IFRS 9 or IAS 39 hedge accounting?**

Insurers will need to consider carefully the relative advantages and disadvantages of applying IFRS 9 or IAS 39 hedge accounting. These include:

- IFRS 9 more closely aligns hedge accounting with risk management activities undertaken by companies when hedging their financial and non-financial risk exposures.
- One of the more onerous requirements of IAS 39 is that the hedge relationship is highly effective. In other words, entities are required to perform quantitative assessments both on a prospective basis to demonstrate the hedge is expected to be highly effective, and on a retrospective basis to demonstrate that the actual results of the hedge are within a range of 80-125% effectiveness. This means that some valid economic hedges fail because they are not close enough for hedge accounting purposes. IFRS 9 relaxes the requirements for hedge effectiveness, removing the 80-125% bright line and taking away a significant obstacle to hedge accounting for some risk management strategies.

<sup>2</sup> EU insurers that are not SEC registrants also have available a 'carve out' version of fair value macro hedge accounting. See page 14 for further details.



- IFRS 9 enables more hedges to qualify for hedge accounting, including hedges using non-derivative financial instruments measured at FVPL and hedges of risk components of non-financial items, with the result that it enables the financial statements to better reflect the risk management activities actually used.
- IFRS 9 also permits an entity to apply a 'cost of hedging' approach, which allows an entity to designate only the intrinsic value of a purchased option as the hedging instrument, and to account for the changes in the time value in OCI. The changes in time value would be removed from OCI and recognised in profit or loss either over the period of the hedge or when the hedged transaction affects profit or loss. This approach reduces the volatility reported in profit or loss for these option-based hedges, and it removes a potential obstacle to sensible risk management practice.
- IFRS 9 limits an entity's ability to voluntarily de-designate hedges, and it limits the ability in IAS 39 to hedge foreign currency on an undiscounted basis.
- Regardless of whether an entity chooses to apply IFRS 9 or IAS 39 hedge accounting, it can still apply IAS 39's specific requirements for macro fair value hedge accounting for interest rate hedges.

Insurers will need to weigh the relative advantages and disadvantages of applying IFRS 9 or IAS 39 hedge accounting, based on their particular facts and circumstances. However, we think that some insurers will find the requirements for hedge accounting in IFRS 9 more attractive than those in IAS 39.

#### 4. Tools in the IFRS 9 toolbox - hedge accounting

Provided that specific requirements are met, an entity can use hedge accounting to eliminate some types of accounting mismatches. Hedge accounting avoids accounting mismatches by allowing entities to adjust the measurement of a hedged item, or adjust the recognition of gains and losses for a hedging instrument. As a result, gains and losses on the hedged item and the hedging instrument are recognised consistently in profit or loss<sup>3</sup> in the same accounting period. This section considers the accounting tools in IFRS 9 that could be used to minimise accounting mismatches where an insurer undertakes hedging activities. These are:

- hedge accounting for hedges of assets including future reinvestments of assets; and
- hedge accounting for hedges of insurance liabilities, including macro fair value hedge accounting.

Section 5 considers the accounting tools available in IFRS 17 that could be used to minimise accounting mismatches.

##### 4.1 Hedge accounting for hedges of assets

###### What is the approach?

The insurer can apply the following asset hedging strategies:

- Hedges of the highly probable forecast reinvestment of the proceeds that will be received when existing assets mature and need to be reinvested because the cash flows on the insurance contract are expected to happen later. Such hedges would mitigate the risk that the insurer will not be able to reinvest the proceeds received on maturity of existing assets at the same rate. For example, the insurer might hold a forward-starting swap that 'swaps' the market rate at the time of the reinvestment to a fixed rate.
- Hedges of existing assets. Such hedges would mitigate the risk that the cash flows from, or fair value of existing assets held do not match the cash flows promised under the insurance contracts or the fair value of the contract. For example, the insurer might hold an interest swap that 'swaps' floating rate cash flows on assets to a fixed rate, or a total return swap that 'swaps' the total return on equity investments to a fixed return.

When such strategies are applied, an accounting mismatch could arise when:

<sup>3</sup> Or, for equity instruments measured at FVOCI, through OCI.

(a) the effect of changes in interest rates or other variables on the value of the hedging instrument (that is, the interest rate swaps, forward starting swaps or total return swap) is recognised immediately in profit or loss; while

(b) the effect of those changes on the hedged item is not, either because some or all of the changes are recognised in a different period, or because they are recognised in OCI.

An insurer could apply hedge accounting to mitigate such accounting mismatches, by characterising the hedge as a protection against the variability of future cash flows or the fair value related to the assets, provided the criteria for hedge accounting in IFRS 9 are met.

#### **Example - hedge accounting for a highly probable forecast reinvestment**

An insurer holds a bond that it expects to hold until it matures in 10 years' time to back claims on insurance contracts that it expects to pay in 20 years' time.

There is an economic mismatch because the insurer may not be able to reinvest the proceeds it will receive when the bond matures in 10 years' time in a bond that yields the same level of return. To mitigate this risk, the insurer could hedge the forecast purchase of a replacement bond in 10 years' time with a derivative such as a forward starting swap. Cash flow hedge accounting could be applied provided that all of the conditions for hedge accounting are met. In particular the insurer would need to demonstrate that:

- (a) the forecast purchase of replacement assets is highly probable;
- (b) the future purchase of bonds (either the purchase price or interest cash flows of those bonds) contains exposure to the interest rate risk designated as being hedged; and
- (c) the term of the replacement assets will be at least as long as the derivative used as the hedging instrument.

Applying cash flow hedge accounting, the insurer would:

- (a) designate as the hedged item the future purchase of bonds with the designated interest rate risk exposure that will occur when interest income or proceeds on maturity of the existing bonds are reinvested;
- (b) designate as the hedging instrument the instrument held to mitigate risk, i.e. the forward starting interest rate swap; and
- (c) to the extent effective, recognise in OCI the changes in fair value of the hedging instrument in OCI until the insurer recognises interest income on the bond purchased in profit or loss when the bond matures in 10 years' time.

At the same time, the insurer could choose to recognise insurance finance income or expenses arising from the effect of any changes in discount rates and financial risk on the insurance contract in OCI.

#### **PwC Observations: Cash flow hedging has already been successfully applied in limited circumstances**

- In some limited cases, a few insurers already apply cash flow hedge accounting for hedges of existing assets and forecast reinvestments.
- However, this approach could have limited applicability, as it might be difficult for an insurer with longer-term financial assets to demonstrate that the forecast reinvestment of an eligible instrument is highly probable, in particular where the forecast reinvestment is far into the future.
- If only a portion of the expected reinvestments are highly probable, the insurer could consider a layer approach, where it applies hedge accounting to only a 'bottom layer' of reinvestments that are judged to be highly probable. However, the amount judged to be highly probable is likely to reduce as the time-scale increases.

## Advantages and limitations of hedge accounting for hedges of assets

Advantages	Limitations
<ul style="list-style-type: none"><li>• Could be effective to mitigate volatility arising from duration mismatches.</li><li>• A few insurers already apply hedge accounting on this basis, so it has been demonstrated to work, at least in limited circumstances.</li></ul>	<ul style="list-style-type: none"><li>• Might have limited use for longer-term reinvestments, because it could be difficult to demonstrate that reinvestments are highly probable.</li><li>• Hedging highly probably expected reinvestments might restrict the insurer from being able to sell the existing bonds that are designated as the hedged item, since doing so might call into question whether the reinvestment was highly probable.</li><li>• To the extent that insurers do not already manage cash flows and risk in this way, they will need to implement processes to designate and review investments.</li><li>• Hedge accounting can only be applied prospectively, and there will be ineffectiveness for pre-existing hedges.</li></ul>

## 4.2 Hedge accounting for hedges of liabilities

### What is the approach?

The fair value of insurance contracts generally varies with interest rates. An insurer might hold a derivative (for example, an interest rate swap) to hedge exposure to the interest rate risk inherent in an insurance contract. The derivative would protect the insurer from changes in the fair value of the insurance contracts that arises from a change in interest rates.<sup>4</sup>

An accounting mismatch could arise where:

- (a) the effect of changes in interest rates on the value of the derivative is recognised immediately in profit or loss; and
- (b) either:
  - (i) applying the general model, the effect of changes in the same interest rates on the insurance contracts is recognised in OCI, in accordance with the insurer's accounting policy. The accounting policy choice is applied at the level of a portfolio of insurance contracts that might not align with the portfolios used to assess the business model for assets held; or
  - (ii) applying the variable fee approach, the effect of changes in the same interest rates on the insurance contracts adjusts the contractual service margin, if the risk mitigation in IFRS 17 is not applied (see Section 5 below).

Applying fair value hedge accounting to the interest rate risk inherent in an insurance contract, an insurer would characterise the economic hedge to protect itself from changes in the fair value of the insurance contract that arise from changes in the designated interest rate. The insurer would:

- (a) designate as the hedged item the interest rate risk component of the insurance contract;
- (b) designate as the hedging instrument the derivative; and

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<sup>4</sup> For some insurance contracts, the payments to policyholders might also vary directly in response to changes in interest rates. This paper does not address hedges of cash flows to policyholders that vary with interest rates.

- (c) recognise changes in the fair value of the interest rate component of the insurance contract in profit or loss to offset, in whole or in part, changes in the value of the derivative recognised in profit or loss.

To apply fair value hedge accounting, the interest risk component designated as being hedged must be separately identifiable and reliably measurable - that is, it must be a separately identifiable component of the insurance contract, and the changes in the cash flows or fair value of the item attributable to changes in that component must be reliably measurable. IFRS 9 requires these criteria to be assessed in the context of the particular market structure to which the risks relate and in which the hedging activity takes place.

**PwC Observations: Is interest rate risk in an insurance contract separately identifiable and reliably measurable?**

- There is considerable judgement involved in assessing whether interest rate risk in an insurance contract is a separately identifiable and reliably measurable component in all but the simplest contracts:
  - There might be a lack of an obvious market structure for insurance contracts. The pricing of insurance contracts might vary with a number of factors and not only with interest rate risk. In such cases, significant judgment will need to be applied to determine the market structure relevant to such contracts.
  - Whilst there might be a similar lack of a market structure/observable transactions for loans issued by banks, the cash flows of insurance contracts are more complex. Insurance contracts might also have discretionary crediting rates or participation in underlying assets, guarantees, and different pay-outs depending on whether there are lapses, mortality or maturity. IFRS 9 does not permit insurers to designate the interest rate risk whilst ignoring the effect of these features on the fulfilment cash flows.
  - IFRS 17 requires an entity to separate all distinct investment components from the host insurance contracts and to account for them in accordance with IFRS 9 (often referred to as unbundling). IFRS 17 has specific requirements for identifying a distinct investment component, including that the entity can measure the investment component without considering the host contract and that the policyholder must be able to benefit from each component without the other component present (that is, the components do not 'lapse together'). The definition of distinct investment component in IFRS 17 differs from the definition of separately identifiable risk components in IFRS 9. Thus, investment components that are not unbundled applying IFRS 17 would still need to be assessed to determine if they meet the criteria for being considered separately identifiable risk components applying IFRS 9.
- Paragraph B.6.3.10(d) of IFRS 9 gives as an example a fixed-rate debt instrument for which an entity concluded that the benchmark interest rate is a separately identifiable and reliably measurable component because of characteristics in the environment in which it is issued. Similar to that example, an entity could conclude that an interest rate component of an insurance contract is separately identifiable and reliably measurable, when the insurance contracts are issued in an environment with a market where:
  - Similar insurance contracts are compared to each other in the relevant market by their spreads to a benchmark rate.
  - Interest rate swaps are frequently used to manage interest rate risk on the basis of that benchmark rate.
  - The price of the insurance contracts varies directly in response to changes in the benchmark rate as they happen.

Significant judgement might be needed, depending on the particular facts and circumstances.

If interest rate risk is determined to be a separately identifiable and reliably measurable risk component, an insurer will need to determine how it will operationally measure the change in fair value due to changes in interest rates. A question would be whether an insurer could use data generated for actuarial estimates or solvency purposes as a starting point (similar to the use of data generated for Basel models as a starting point for IFRS 9's expected credit losses calculation by banks), and what adjustments would need to be made. The adjustments needed might be complex and significant.

Finally, insurance contracts are affected by factors other than interest rate risk, including mortality risk and risks arising from policyholder behaviour, such as lapse risk. In some cases this might result in a high level of economic ineffectiveness.

**PwC Observations: Fair value hedge accounting might be difficult to achieve in practice**

- We think that 'micro' fair value hedge accounting (that is, at a contract level) would have limited applicability for insurers. Most insurers manage open portfolios of insurance contracts with regular lapses and the addition of new contracts. Because most insurers use a dynamic portfolio of assets to back a dynamic portfolio of insurance contracts, and they use a dynamic portfolio of derivatives to mitigate the effects of mismatches between the two, it could be difficult to identify, designate and track individual fair value hedges.
- Ineffectiveness is likely to arise where 'micro' fair value hedge accounting is applied, because the measurement of insurance contracts might reflect policyholder behaviour (such as lapse or surrender risk). Policyholder behaviour might change as a result of changes in market variables. For example, if equity markets fall, a policyholder might hold onto contracts with guarantees because the contracts will now be more valuable, or the policyholder might lapse the policy because the policyholder requires the cash. When an insurer measures the change in fair value of an insurance contract, the effect of changes in market variables on those policyholder behaviour features needs to be included. If the principal terms of the hedging instrument and the hedged item are the same, the changes in fair value and cash flows attributable to the risk being hedged might be likely to offset each other fully, both when the hedge is entered into and afterwards. However, the effects of policyholder behaviour on insurance contracts are unlikely to be reflected in the hedging instrument. As a result, policyholder behaviour could result in ineffectiveness – for example, where valuable options lapse unexercised. If an insurer applies fair value macro hedge accounting instead, it would need to demonstrate only that the hedge is effective to the next repricing date, as described below. That might reduce the degree of ineffectiveness that the insurer needs to consider.

**Macro fair value hedge accounting**

Because of difficulties in identifying, designating and tracking individual fair value hedges for dynamic, open portfolios of insurance contracts, an insurer might want to consider applying IAS 39's model for 'fair value macro hedges' - that is, for fair value hedges of the interest rate exposure of a portfolio of financial assets or financial liabilities.

Entities using IFRS 9 for hedge accounting can continue to apply IAS 39's requirements for fair value macro hedges. This approach was specifically designed for hedges of open portfolios where both the contracts being hedged, and the derivatives used to hedge them change frequently. It accommodates such hedges of open portfolios by treating them as a series of closed portfolios with short lives, and then regularly updating that portfolio and the derivatives designated as hedging it as the hedged position changes. This makes it more useful when managing dynamic, open portfolios that change over time.

In a fair value macro hedge:

- An entity identifies a portfolio of items whose interest rate risk it wishes to hedge as part of its risk management process. It analyses that portfolio into repricing time periods, based on expected repricing dates ('time buckets').
- On the basis of the time buckets, the entity designates as the hedged item the interest rate risk from an amount of assets or liabilities from the portfolio. This amount is used for testing ineffectiveness. The entity could designate a portion of the interest rate risk in the hedged position, provided that the portion can be separately identified and reliably measured.
- The entity designates one or more hedging instruments for each time bucket.
- The entity assesses whether the hedge is expected to be highly effective at inception and during subsequent periods. The effectiveness tests are determined based on the change in fair value of the amount of assets or liabilities designated in a time bucket, rather than on the individual assets or liabilities.

- If the hedge is determined to be highly effective, the entity recognises the change in fair value of the hedged items in profit or loss. The change in fair value of the hedging instruments is also recognised in profit or loss. Therefore, any ineffectiveness will be recognised in profit or loss.
- After testing effectiveness and making the accounting entries noted above, the entity adjusts the designated hedged portfolio to reflect any changes in it (for example from the origination of new assets or liabilities), and it repeats the process set out above.

In testing ineffectiveness in a fair value macro hedge, the same prospective and retrospective tests as for a 'micro' fair value hedge are required. However:

- The expected repricing dates are determined as the earlier of the dates when the item is expected to mature and when it is expected to reprice to market rates. Because the entity tests effectiveness on the basis of an amount of assets and liabilities analysed into these time buckets, the entity needs to demonstrate that the hedge is effective only to the date when the designated hedged portfolio is adjusted.
- For a group of similar items, the analysis into time periods based on expected repricing dates might take the form of allocating a percentage of the group, rather than individual items, to each time period, provided that the methodology is in accordance with the entity's risk management procedures and objectives - for example, bottom layers are not allowed.

**PwC Observations: Lapse and surrender features in insurance contracts can be a source of ineffectiveness**

- Lapse or surrender features present in many insurance contracts could be regarded as similar to a prepayment option in a loan. An entity is permitted to exclude changes in expected repricing dates (for example, from the exercise of prepayment options) when determining the change in the fair value of the hedged item provided that it is not attributable to the hedged interest rate; in other words, the following criteria must be met:
  - the changes clearly arise from factors other than changes in the hedged interest rate;
  - the changes are uncorrelated with changes in the hedged interest rate; and
  - the changes can be reliably separated from changes that are attributable to the hedged interest rate.
- However, to the extent that changes in lapse or surrender rates do not meet these criteria, that effect would need to be included as a source of ineffectiveness.

**PwC Observations: EU carve out version of macro fair value hedge accounting available**

EU insurers that are not SEC registrants also have available a 'carve out' version of fair value macro hedge accounting. The 'carve out' version allows the introduction of a bottom layer for the purposes of measuring ineffectiveness. This allows for the hedged item to be designated as the stream of cash flows that, on a portfolio level, lapses or surrenders last, and so it is least affected by the timing of lapses and surrenders. This can mitigate a source of ineffectiveness that otherwise would arise.

### **Example - macro fair value hedge accounting for interest rate risk arising from a portfolio of insurance contracts**

An insurer might hold derivatives to mitigate the interest rate risk inherent in a portfolio of insurance contracts for which it applies an accounting policy to recognise insurance finance income or expense partly in profit or loss and partly in OCI.

Fair value macro hedge accounting could be applied, provided that all of the conditions for hedge accounting are met. In particular, the insurer would need to demonstrate that the hedge effectiveness requirements are met (see page 8), interest rate risk in the portfolio of insurance contracts is a separately identifiable component, and the changes in the fair value of the portfolio attributable to changes in interest rate risk are reliably measurable.<sup>5</sup>

Applying fair value hedge accounting, the insurer would recognise changes in the fair value of the interest rate component of the insurance contract in profit or loss, in order to offset, in whole or in part, changes in the value of the derivative recognised in profit or loss.

### **PwC Observations: Operational implications of macro fair value hedge accounting**

There are operational implications of applying fair value macro hedge accounting. Insurers will have to set up systems to designate and track hedged items, as well as for the calculations necessary to measure ineffectiveness and to perform the necessary amortisation and recycling:

- Insurers will need to schedule the hedged liabilities into appropriate time buckets. Since insurance contract portfolios might span several decades, this could result in a large number of time buckets. Whilst using narrower time buckets will generally reduce ineffectiveness, a higher number of time buckets, will increase the complexity.
- Complex tracking will be required:
  - With each time bucket that passes, any remaining hedge adjustment related to that time bucket is immediately recognised in profit or loss.
  - For a particular time bucket, a reduction in the amount being hedged triggers amortisation in profit or loss of the related hedge adjustment over the remaining life of the items in the time bucket. In a portfolio fair value hedge, entities need to track every time bucket in order to know when to amortise. The more time buckets that are used in the designation, the greater the extent to which tracking is required.
- An insurer will need to measure and recognise ineffectiveness every time that it adjusts the hedged portfolio to reflect changes in it (for example, to add newly originated contracts). Whilst a greater frequency of adjusting the hedged portfolio will generally reduce ineffectiveness, it will also increase the complexity.

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<sup>5</sup> If the EU 'carve out' is applied, an insurer could designate the interest rate component of the bottom layer of cash flows (that is, designate those components in contracts that are expected to lapse or surrender last) as the hedged item.

## Advantages and limitations of hedge accounting for hedges of liabilities

### Advantages

- While fair value hedging at a contract level might have limited use, fair value macro hedging is aligned to how insurers might manage open portfolios of insurance contracts.
- The ability to designate the hedged item as an amount in each time bucket, rather than specific liabilities, allows more flexibility in how much to designate in each period.

### Limitations

- It might be difficult to demonstrate that the interest rate component is separately identifiable and reliably measurable.
- The features of many common insurance contracts (such as interest-sensitive lapse rates) might result in ineffectiveness.
- Fair value macro hedging is operationally challenging and requires complex tracking.
- Hedge accounting can only be applied prospectively, and there will be some ineffectiveness.

## 5. Tools in the IFRS 17 toolbox

This section considers the accounting tools in IFRS 17 that could be used to minimise accounting mismatches other than hedge accounting. These are:

- electing to include insurance finance income or expense in profit or loss and using the fair value option for backing assets; and
- applying the risk mitigation option in IFRS 17 (for contracts to which the variable fee approach applies).

### 5.1 Electing to present insurance finance income or expense in profit or loss and using the fair value option for backing assets

#### What is the approach?

An insurer could, as an accounting policy choice, choose to include insurance finance income or expenses for the period in profit or loss. Where that is the case, the insurer could, at initial recognition, irrevocably designate financial assets not otherwise measured at FVPL to be so measured, if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise (commonly referred to as the 'fair value option'). This would mean that, to the extent there is an economic offset between the gains and losses on insurance contracts and the corresponding losses and gains on the assets, such gains and losses would naturally offset in profit or loss.

#### Example - natural offset of effects of interest rate risk in profit or loss

An insurer issues a portfolio of insurance contracts with expected cash flows over 10 years, and a portfolio of bonds whose cash flows are expected to match the cash flows on the insurance contracts over that 10-year period. If the insurer includes insurance finance income or expenses for the period in profit or loss, the effect of any changes in discount rates and financial risk on the insurance contracts would be recognised in profit or loss as insurance finance income or expenses. That amount reflects both the effects of changes in interest rates and the effects of any changes in liquidity premiums.

If the insurer also designates the bonds held as at FVPL, the effect of changes in discount rates and financial risk on the bond portfolio would also be recognised in profit or loss. That amount reflects both the effects of changes in interest rates and the effects of any changes in credit risk.

There would be a natural offset relating to the effect of changes in interest rate risks. The economic mismatch that arises between the assets and insurance contracts would not offset, and so it would remain in profit or loss.



**PwC Observations: Using the profit or loss option for insurance finance income and expenses and the fair value option for backing assets can be a useful tool where risks are well matched**

- Recognising all changes in value of financial assets and insurance liabilities within the finance result section of the income statement will be operationally easier than hedge accounting, because it does not require the extensive documentation, systems, designations and tracking required for hedge accounting.
- Including insurance finance income or expense in the income statement and electing the fair value option for assets might be a sensible approach for some portfolios of insurance contracts (for example, shorter-term portfolios of insurance contracts backed with bonds). For such portfolios, the risks can be well matched for the full term of the insurance contracts.
- However, where the risks in the assets and the insurance contracts are less well matched, this approach will mean that the full impact of the economic mismatch will be reported in profit or loss. This might be the case, for example, where an insurer is not able to acquire long-duration bonds that match longer-duration contracts, or where an insurer backs insurance contracts using corporate bonds that are affected by changes in credit spreads. Bond durations seldom exist over the durations that match many insurance contracts, which can be more than 60 years. Similarly, any unhedged or unmatched risk (including changes in the credit risk of the assets) will result in volatility in the income statement.
- In addition, applying the general measurement model, any volatility relating to the insurer's share of the underlying items would be recognised in profit or loss. Mismatches would still arise between changes in the insurer's share of underlying items and the timing of recognition of the contractual service margin in profit or loss.

**Advantages and limitations of using the profit or loss option for insurance finance income and expenses and the fair value option for backing assets**

Advantages	Limitations
<ul style="list-style-type: none"><li>● Operationally simple, with no need for complex designation, tracking systems, effectiveness testing or measuring ineffectiveness.</li><li>● Although the financial income and expenses option for insurance contracts is applied at a portfolio level, the fair value option for assets is applied on an instrument-by-instrument level. This gives the insurer the ability to designate in a way that best fits.</li></ul>	<ul style="list-style-type: none"><li>● Will result in volatility in profit or loss to the extent of unmatched risk or, where the variable fee approach is applied, from the insurer's share of underlying items.</li><li>● The approach will only significantly reduce volatility in profit or loss for portfolios that are well matched. That could mean that the level of aggregation for the insurance contracts would need to be more granular than might otherwise be considered so as to identify portfolios that are well matched.</li></ul>

**5.2 Applying the risk mitigation option in IFRS 17 (for contracts to which the variable fee approach applies)**

Different accounting mismatches can occur where the variable fee approach applies. This is because, in the variable fee approach, the contractual service margin is adjusted for changes in fulfilment cash flows arising from changes in financial risk. IFRS 17 includes a risk mitigation option. That option is designed to address a specific accounting mismatch that arises where an entity holds financial instruments measured at FVPL (including derivatives) or reinsurance contracts to mitigate financial risks arising from insurance contracts with direct participation features.

## What is the approach?

The risk mitigation option in IFRS 17 will allow insurers to avoid accounting mismatches created by the variable fee approach by permitting them to not adjust the contractual service margin for changes in the fulfilment cash flows where the insurer holds financial instruments measured at FVPL, or reinsurance contracts, intended to mitigate financial risks arising from those insurance contracts. The risk mitigation option permits an insurer to 'switch off' the variable fee approach to the extent that financial risk is mitigated. Applying the risk mitigation option, an insurer recognises immediately in profit or loss some or all of the changes in the effect of financial risk on insurance contracts with direct participation features that would otherwise adjust the contractual service margin of those contracts.

### **PwC Observations: Prospective application on transition**

- Entities will be able to apply the risk mitigation option prospectively on or after the transition date if, and only if, the entity designates risk mitigation relationships at or before the date it applies the option. The transition date is the beginning of the annual reporting period immediately preceding the date of initial application.
- Entities that intend to apply IFRS 17 for annual periods beginning on or after 1 January 2023 should consider documenting risk mitigation relationships from 1 January 2022 to enable them to report the effects of the risk mitigation option in their comparative financial statements.

### **Example - applying the risk mitigation option where derivatives mitigate risks arising from a guarantee**

A group of insurance contracts to which the variable fee approach applies includes a financial guarantee. The insurer purchases a derivative to mitigate the risks in the guarantee. Applying IFRS 9, such derivatives are measured at FVPL. For contracts with direct participation features, the contractual service margin would be adjusted for the changes in the fulfilment cash flows, including changes that the derivatives are intended to mitigate. To avoid this potential accounting mismatch, the insurer can choose not to adjust the contractual service margin for the changes in the fulfilment cash flows that are mitigated by the derivative. Instead, the insurer would recognise those fair value changes in profit or loss.

To apply the risk mitigation option, an entity must have a previously documented risk management objective and strategy for mitigating financial risk arising from the insurance contracts using financial instruments measured at FVPL or reinsurance contracts and, in applying that objective and strategy:

- (a) the entity mitigates the financial risk arising from the insurance contracts using a financial instrument measured at FVPL or a reinsurance contract held;
- (b) an economic offset exists between the insurance contracts and the financial instruments measured at FVPL or reinsurance contracts held (that is, the values of the insurance contracts and the financial instruments measured at FVPL or reinsurance contracts held generally move in opposite directions because they respond in a similar way to the changes in the risk being mitigated); an entity does not consider accounting measurement differences in assessing the economic offset; and
- (c) credit risk does not dominate the economic offset. This condition follows from the requirement for an economic offset because, if credit risk were to dominate the value changes associated with the hedged risk, the level of offset might become erratic. A similar requirement is included in the hedge accounting criteria in IFRS 9.

**PwC Observations: The risk mitigation option is operationally simpler than hedge accounting**

- Although criteria apply for an insurer to use the risk mitigation option in IFRS 17, it can be applied without the complex designation and tracking required for hedge accounting. An insurer is also able to use the risk mitigation option to the extent that any accounting mismatch exists. Hence, to the extent that the risk mitigation option is available, it can be achieved with less operational burden, and with more elimination of accounting mismatch, than using the tools available in IFRS 9.
- The risk mitigation option was originally available only where an insurer used derivatives to mitigate risks from insurance contracts with direct participation features (that is, contracts to which the variable fee approach applies). In the project to amend IFRS 17, the IASB extended the risk mitigation option to apply in circumstances where an insurer uses financial instruments measured at FVPL or reinsurance contracts held to mitigate financial risk arising from insurance contracts with direct participation features. The insurer would be permitted to include in profit or loss, some or all of the changes in the effect of financial risk on insurance contracts with direct participation features that usually adjust the contractual service margin.

**Advantages and limitations of applying the risk mitigation option in IFRS 17**

**Advantages**

- Operationally simple, with no need for complex designation, tracking systems, effectiveness testing or measurement of ineffectiveness.
- The risk mitigation option is applied to the extent that the insurer has a previously documented risk-management objective and strategy and to the extent that an economic offset exists. This provides the insurer with flexibility to determine the extent to which the risk mitigation option is applied.

**Limitations**

- Only available for contracts to which the variable fee approach applies.
- Only available prospectively, so it will not mitigate mismatches for risk mitigation approaches already in place at the date of transition.

**6. Conclusion**

The interaction of two accounting standards with different measurement bases inevitably creates the possibility of accounting mismatches that insurers will not previously have considered. Insurers have available tools in IFRS 9, IAS 39 and IFRS 17 that might mitigate some of those mismatches.

While the tools in IFRS 17 are simpler to apply, some insurers might find it helpful to apply hedge accounting to particular situations, provided that all the relevant conditions for hedge accounting are met. Hedge accounting for hedges of assets might be useful where these are used to mitigate duration mismatches but it might have limited applicability due to the long durations of many insurance contracts which could be many times longer than the duration of available assets. For hedges of liabilities, fair value macro hedging might be the most useful tool, because it is likely to be more aligned to how insurers might manage open portfolios of insurance contracts.

Insurers applying hedge accounting will need to consider carefully how to mitigate accounting volatility as part of their strategy for implementation. In assessing whether hedge accounting will be a useful tool for their circumstances, insurers will need to identify and weigh the costs and benefits. Hedge accounting requires the meeting of strict qualifying criteria and extensive documentation, including of the risk management objective and strategy, the nature of risk being hedged. It also requires that hedge effectiveness criteria are met and that ineffectiveness is measured and recognised. In addition, for fair value macro hedge accounting to be used, insurers would need to set up systems to designate and track hedged items in appropriate time buckets as well as to perform the calculations necessary to measure ineffectiveness and to do the necessary amortisation and recycling. Furthermore, hedge accounting will not eliminate all accounting mismatches, and its application might still leave insurers with some volatility in profit or loss, including any volatility arising from hedge ineffectiveness. Nevertheless, it can provide a useful tool for reducing accounting mismatches that is aligned to how insurers might manage open portfolios of insurance contracts.

This publication has outlined at a high level the tools that are available, and it will be important for insurers to select the right tools considering the costs and benefits. In order to determine the best approach, insurers will need to perform careful analysis of their insurance contracts and asset portfolios, including analysing the effect in different scenarios of different policy choices. When considering whether to apply hedge accounting, it might be better to 'start simple' - for example, considering hedges of assets, or hedges of simpler, less dynamic insurance portfolios, where all of the cash flows are either known or can be predicted with a high degree of certainty. The approach, and, in particular, use of the fair value macro hedge might then be considered for more complex situations as a subsequent step.

We hope that this publication has provided you with insight into the tools available and practical tips on when each might be the best tool for the job. PwC clients who have questions about this Spotlight should contact their engagement partner.

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