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# CSM and P&L assessment

under IFRS 17

Main issues & steering challenges

# C<sub>SM</sub> and P & L

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# Assessment

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# CSM and P&L assessment

under IFRS 17

## Executive summary

**The IFRS 17 standard falls within a worldwide accounting evolution.  
It aims at:**

- Unifying the insurance accounting system,
- Facilitating comparison between the undertakings' financial situation,
- Globally improving the financial communication, by addressing the current accounting deficiencies (in particular with a fair value of insurance contracts disclosed in the P&L).

IFRS 17 introduces a systematic assessment of insurance contracts profitability that affects the undertaking's P&L. Companies have to master the possible levers induced by this concept and to define their new management tools. The concept will also force the insurance community and investors to adapt the business analysis.

**T**his paper deals with the **drivers of the IFRS 17 Profit** (assets classification background under IFRS 9 and CSM measurement approaches), the **disclosure of the P&L account** and the **solutions identified to handle the volatility and mismatch related to IFRS 17 valuation.**

# A P&L driven by assets and liabilities valuation

## What does the IFRS 17 P&L depend on?

The **assets classification and the selected model for technical provisions valuation** strongly affect the P&L under IFRS 17.

Indeed :

- IFRS 9 considers three methods to value the assets. The impact on the P&L and the Balance Sheet will depend on the chosen method,
- Similarly, the selected method for liabilities valuation will change the P&L and the Balance Sheet of undertakings.

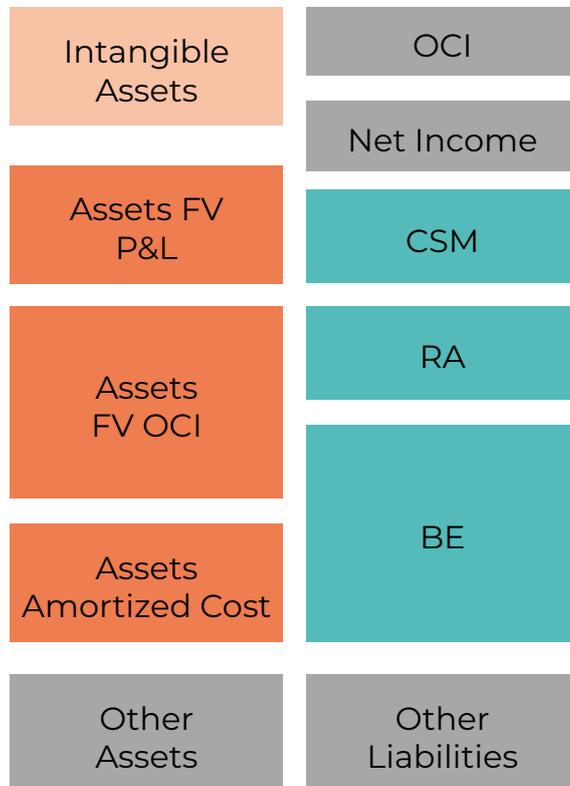
Assets: 3 classifications and measurements models (IFRS 9)

Fair Value P&L  
Fair Value OCI  
Amortized Cost



Impact of the assets variation on the Balance Sheet

P&L  
OCI  
BE, RA & CSM



Technical provisions: 3 measurement models (IFRS 17)

BBA  
VFA  
PAA



Impact of the technical provisions variation on the Balance Sheet

P&L  
OCI  
Compensation by CSM

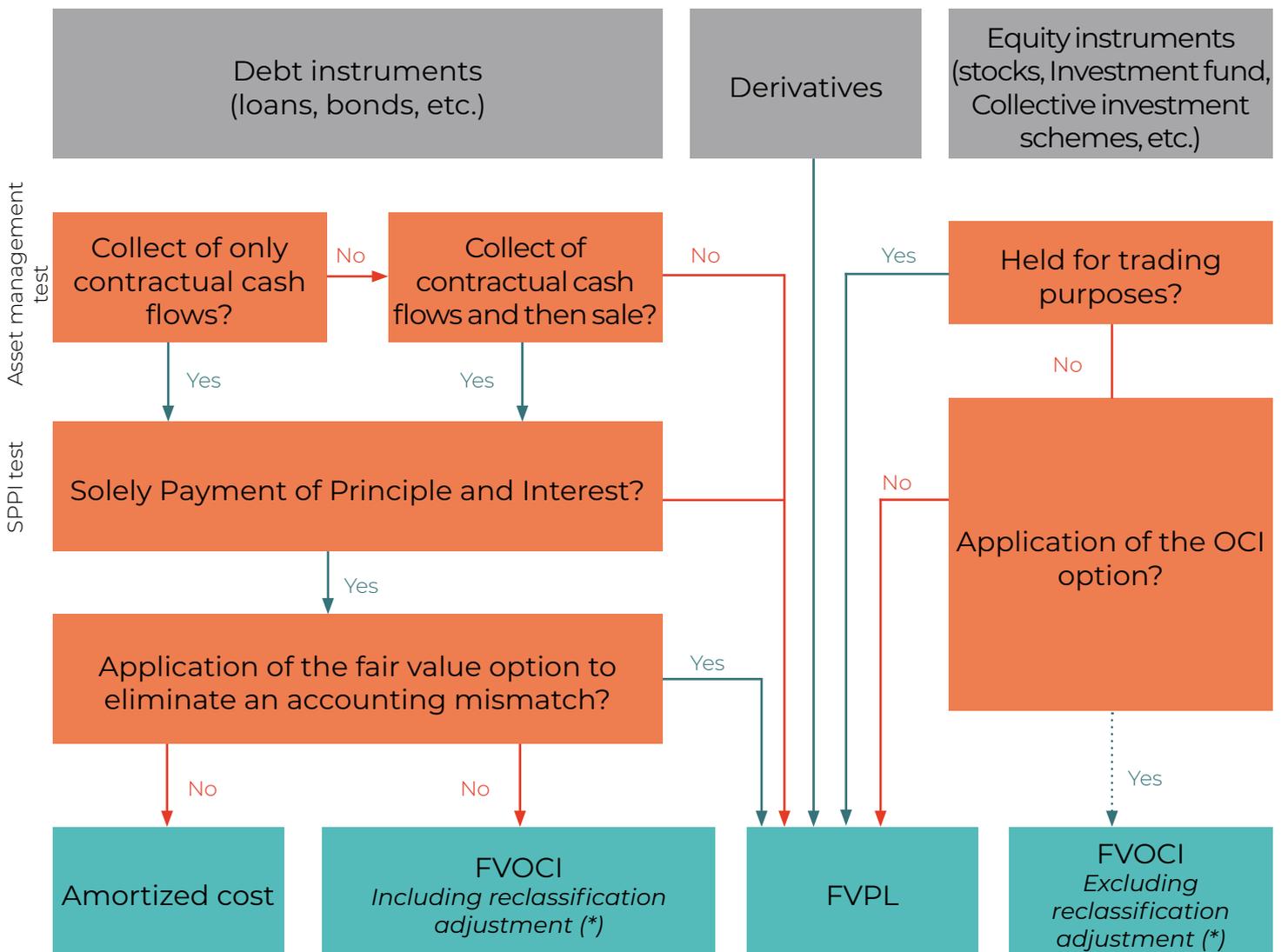
# CLASSIFICATION AND MEASUREMENT OF FINANCIAL ASSETS UNDER IFRS 9

The classification of assets under IFRS9 determines their disclosure and assessment in the financial accounts. It considers two criteria:

- The asset management model (whether the purpose of the purchase is to trade or to collect contractual cash flows),
- Inherent characteristics of the financial instruments (SPPI test - Solely Payment of Principle and Interest).

**The classification of assets in accordance with IFRS 9, determines how assets are recognised and measured in the financial statements.**

The following scheme summarizes the decisional process for this classification:



\*Reclassification adjustment = reclassification of the variation of FV in P&L when selling

### Several financial assets valuation modalities are proposed:

- **FVPL – Fair Value through Profit or Loss:** unrealized gains and losses are entirely recognized in the P&L. Hence, realizing these gains has no impact on the P&L account.
- **FVOCI - Fair Value through Other Comprehensive Income including reclassification adjustment:** unrealized gains and losses are included in the company's equity and are reclassified in P&L when sold.
- **FVOCI - Fair Value through Other Comprehensive Income excluding reclassification adjustment:** fair value variations are recognized in OCI and are not reclassified in P&L when sold. No profit is added to P&L after the sale, only dividends are recognized in the accounting P&L.
- **Amortized cost:** amount at which the financial asset is measured at initial recognition minus the principal repayments, plus or minus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount and adjusted for any loss allowance.

**T**hese valuation methods have an impact on IFRS 17 P&L. They create different levels of volatility on the P&L:

Methods	Eligible assets	Impact on IFRS 17 P&L
<b>FVPL</b>	No condition	Creates volatility of the P&L account while holding the asset, induced by market prices variations.
<b>FVOCI</b> including reclassification adjustment	Debt instruments with intent to sale them before maturity	Avoids volatility in the P&L account while holding the asset (transferred to own funds).
<b>FVOCI</b> excluding reclassification adjustment	Equity instruments with application of OCI option	Transfers volatility to own funds.
<b>Amortized cost</b>	Debt instruments hold until maturity	Gives stability to the P&L account.

**C**oncerning equity instruments not held for trading purposes, a company can choose, in an irrevocable way, to use the OCI option excluding reclassification adjustment.

Furthermore, if the valuation using amortized cost or FVOCI creates an accounting mismatch, a company can choose, in an irrevocable way, to use FVPL if this method reduces the mismatch.

This classification represents therefore a significant opportunity for companies to steer their P&L.

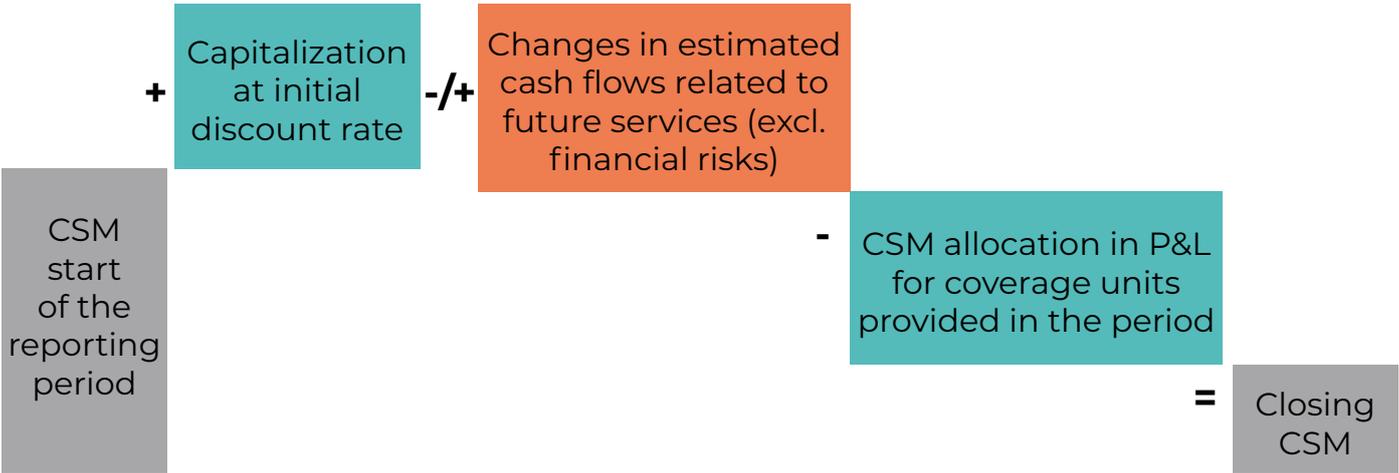
# EVALUATION OF THE CSM AND ELIGIBILITY OF LIABILITIES VARIATIONS IN THE CSM OR IN THE P&L

The CSM calculation depends on both the nature of the contract and the selected model:

In the General Measurement Model, the opening CSM is first increased by its capitalization at the discount rates at recognition. Then, changes in estimated cash flows related to future services are taken into account, excluding adjustments for economic and financial risks or changes related to incurred claims. The systematic amortization due to incurred services is transferred to the P&L (with a rate induced by coverage units).

These adjustments lead to the closing CSM.

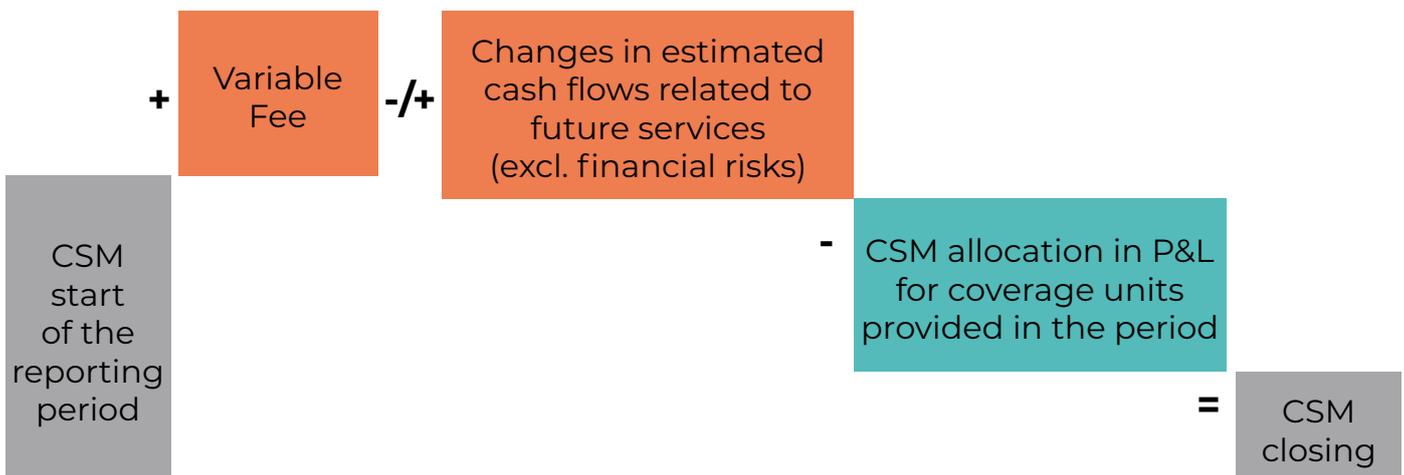
## General model



Eligibility of variations in the CSM	Treatment
Difference on premiums earned during the accounting period	Absorbed by CSM
Other experience adjustments	P&L
Changes in technical assumptions for future cash flows projection	Absorbed by CSM
Changes in discount rates and economic environment for future cash flows	P&L

In the VFA, the CSM is adjusted for all variations (technical or financial shocks) of BE and RA (B112 and B113). It is then amortized over time in the P&L. The VFA seems less volatile than the general measurement model, since the financial result is recognized progressively.

### VFA model



Unlike the general model, the VFA manages insurance contracts with profit sharing. A variable fee is introduced and is equal to the entity's share of the fair value of the underlying items. The variable fee is thus the present value of the insurer's margin:

$$\text{Variable Fee} = \Delta\text{VM market-linked} - \Delta\text{BE market-linked} - \Delta\text{RA market-linked}$$

An increase in the market value of assets thus triggers a rise in the liability of the insurer towards policyholders (reflected in the variation of BE and RA) and an increase of the Variable Fee that adjusts the CSM.

ELIGIBILITY OF VARIATIONS IN THE CSM	Treatment
Difference on refund of deposit component during the accounting period	Absorbed by CSM
Difference on premiums earned during the accounting period	Absorbed by CSM
Other experience adjustments	P&L
Changes in technical assumptions for future cash flows projection	Absorbed by CSM
Changes in discount rates and economic environment for future cash flows	Absorbed by CSM

# Proxies & IFRS

## calculation time improvement

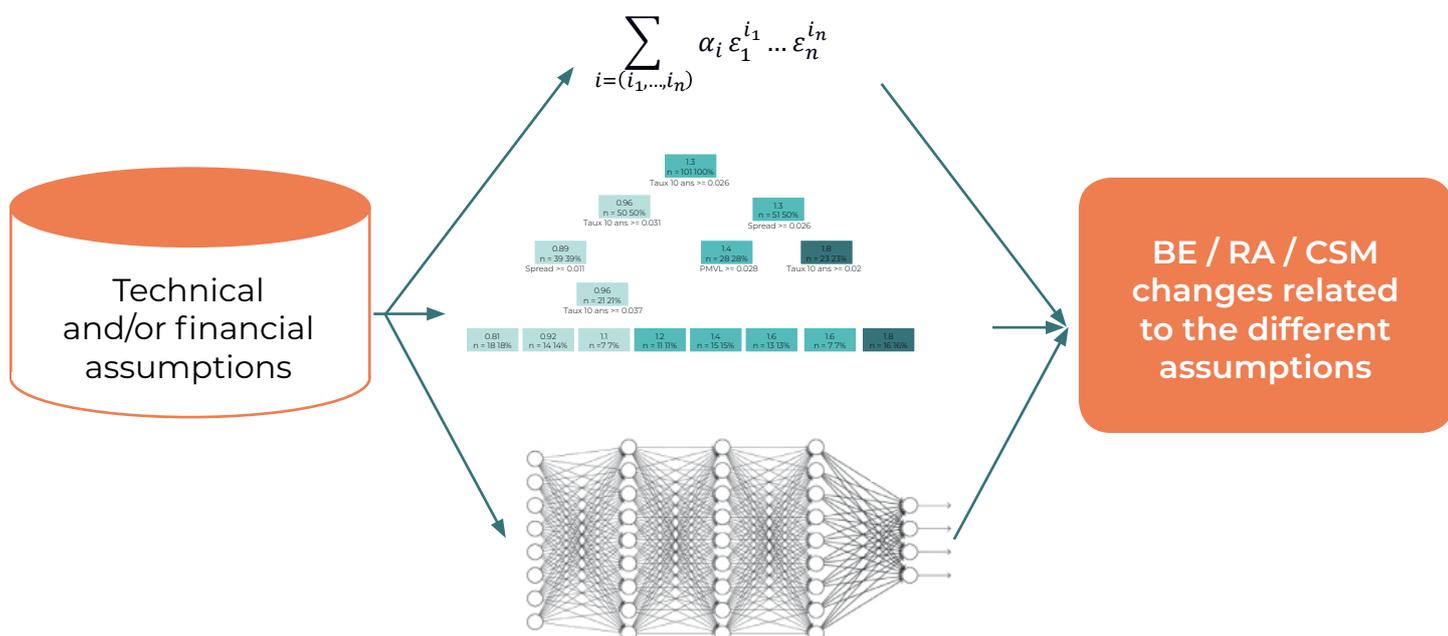
The improvement of calculation time for ALM projections is a key operational lever to tackle optimally the issue of IFRS P&L calculation.

For instance, the use of proxies to decrease the calculation time of sub-annual closings turns out to be very effective. Such proxies frequently appear in ERM features, particularly in the Solvency 2 framework. It may be used to calculate the SCR through an internal model, to monitor the continuous compliance or to evaluate the overall solvency needs.

artificial neural network, etc.), for their predictive performance that considerably improved recently.

Using these algorithms enable to estimate very quickly the impacts of assumption changes (technical and / or financial) on the BE, the RA and the CSM. These results depend on the chosen approach as well (BBA vs VFA).

The considered methodologies often rely on advanced Machine Learning algorithms (linear prediction, decision tree,



The PAA is a simplified adaptation of the general model. It is used, under conditions, for contracts which coverage period is one year or less. The liability for the remaining period is directly reflected by the unearned premiums (§ 55), without any notion of RA or CSM. Concerning incurred claims, an estimation of the BE and the RA is still necessary.

Generally, the CSM has to be amortized in P&L (B119):

- on all coverage periods (i.e. current and future periods),
- taking into account the residual coverage period,
- and considering the services provided for each period.

## CSM allocation & Coverage Units

The **CSM allocation** lies on **coverage units**. They reflect the services provided under the group of insurance contracts in the period. However, no methodology is given by the standard to estimate these services. It is therefore necessary to identify relevant factors, depending on the characteristics of the contracts, to estimate their expected coverage duration as well as the quantity of provided benefits.

These factors will consequently determine the **recognition of profits**. They will thus become a **major steering lever** for insurers to **monitor their IFRS P&L**.

For instance, the CSM may be allocated proportionally to the number of policies, to **insured health capitals**, to **annuities**, or to **premium earning** pattern.

# Disclosure of the P&L account

In order to improve comparability between insurers and even with other industries, IFRS 17 is transforming the presentation of the income statement, generating divergence issues with Local GAAP standards.

## P&L items

The IFRS17 P&L account consists of a technical and a financial results and looks as shown below. The different items are then detailed hereafter:

Technical Result
(+) Profit from insurance contracts
CSM allocation in P&L
Release of Risk Adjustment
Expected claims and expenses
Release acquisition costs cash flows variation
(-) Insurance contract losses
Claims and expenses recorded for the insurance component
Losses and reversals of losses on onerous contracts
Allocated acquisition costs cash flows and costs not related to contracts

Financial Result
(+) Financial income
Income from assets
Change in Fair Value of assets classified in P&L
(-) Financial expenses
Discounting of provisions (CSM, BE and RA)
Change in future cash flows due to a change in estimate of economic and financial environment
Participation of the entity in the fair value of the underlying assets
Benefits and expenses recognized for the deposit component
Release of provisions for the deposit component

## Technical Result

- The treatment of a profitable or onerous contract is not identical under IFRS 17: for a profitable contract, the P&L does not immediately capture the future profitability since the CSM is gradually allocated to profit or loss in accordance with coverage units (item «CSM allocation in P&L»). For onerous contracts, the probable initial loss is immediately recognised as an expense («Losses and reversals of losses on onerous contracts»). In addition, any estimate deviation exceeding the absorption capacity of the CSM is recorded as a loss, since the CSM must remain positive or nul.
- The experience gaps appear in a dedicated item with a comparison of expected and observed claims and expenses («Expected claims and expenses» and «Claims and expenses recorded for the insurance component» items).
- The release of Risk Adjustment at the rate of risk run-off is also taken into account.
- Note that premiums are not explicitly included in the Technical Result.

## Financial Result

- Investment incomes are recognised in accordance with IFRS 9 (coupons, dividends, realised gains and losses of assets recognised as FVOCI including reclassification adjustment, unrealised gains and losses of assets recorded in FV in the P&L, etc.).
- Financial expenses take the capitalization of IFRS 17 liabilities into account, which represents the interest expense on liabilities over the closing period.
- Changes in estimated future cash flows resulting from changes in the yield curve or the financial environment also impact the Financial Result.
- Some specific features are added to the VFA model: on one hand, the capitalisation of the CSM is not to be recorded because it is included in the closing CSM via the Variable Fee component. On the other hand, the insurer's share in the change of the market value of the underlying items is recorded in the Financial Result and corresponds to the Entity Share. Finally, in the case of no insurance guarantee (i.e. an investment contract with discretionary profit participation), the flows corresponding to the payment of benefits are linked to the repayment of a deposit. They are therefore not recorded in the Technical Result but in the financial one, as well as the release of associated provisions.

# AN EXAMPLE OF DIFFERENCES WITH THE P&L

Insurance company management and investors will expect explanations on the evolution of P&L over time and on consistency between the results coming from the different standards.

Below an illustration of divergence issues between IFRS 17 and French local GAAPS:

Item	IFRS 17	French local GAAPS
<b>Time limits</b>	Pre-Close Vision	Final figures
<b>Operational implementation</b>	Decomposition of changes in provisions (same logic as for the prudential reporting statement S29.03)	No decomposition of changes
<b>Compensation inside the P&amp;L</b>	No, because of the non-linearity of the CSM	Yes
<b>Display of premiums</b>	No	Yes
<b>Calculation of provisions and experience differences</b>	Best Estimate approach Gap between estimates and experience displayed in the P&L	Prudence in provisions
<b>Nature of the accounts</b>	Accounting logic by model type (VFA, BBA, PAA)	Life technical account, non-life technical account and non-technical account
<b>Amortization of the Risk Adjustment</b>	Risk Adjustment calculation method to be defined by undertakings	NA
<b>Amortization of profits and losses</b>	Absorption of the shocks by the CSM Immediate recognition of onerous contract	Acquisition of premiums, provision for permanent impairment in value, equalisation provision, etc.
<b>Valuation of assets</b>	At amortised cost, FV OCI or FV by P&L Neither asset provisions nor depreciation	In historical cost with provision for amortization
<b>Steering of the financial result</b>	More steering by the realization of gains and losses for equities (because recorded in FV P&L) but not for bond (because no capitalisation reserve and classification in FVOCI including reclassification adjustment)	Steering through unrealized gains and losses on equities Capitalisation reserve mechanism in order to prevent insurers from selling assets in a low interest rate environment
<b>Financial expenses</b>	Capitalization of provisions and impact of changes in economic environment on future cash flows	Technical interests, Minimum rate guaranteed and variation of unrealised capital gains and profit sharing reserve

# Volatility in the IFRS 17 P&L

## FACTORS OF VOLATILITY

The understanding and anticipation in IFRS 17 results are very sensitive. This is mainly due to the complexity of the norm, as well as the volatility of the P&L. A thorough analysis of the reasons of this volatility enables actuaries to identify management tools and to ensure a transparent and controlled financial communication, such as:



**Accounting mismatch:** accounting mismatches may emerge under IFRS 17. For instance, the P&L could change with BE variations due to yield curve evolutions, even though assets backing/covering are classified in OCI. The standard offers nevertheless mismatch reduction options that are detailed further in this document.

**Recognition of P&L at market value:** the classification of assets under IFRS 9 has a direct impact on their measurement and recognition. Some reclassifications will be possible and should be studied in order to reduce the volatility of the P&L.



**Coverage unit choice:** the profit emergence rate under IFRS 17 is strongly conditioned by the recognition of the CSM. It is thus necessary to make comparative studies of the different allocation methods (technical provisions, insured amount, number of contracts, duration, etc.) before the entry into force of the standard. This allows to assess their stability and impacts on different IFRS KPIs.

**Methodology for calculating the RA:** there is nothing in the standard to precise the calculation of the Risk Adjustment, unlike for the CSM. The level of the Risk Adjustment and its release profile thus depends on the calculation method adopted by the undertaking and has a direct impact on the P&L.

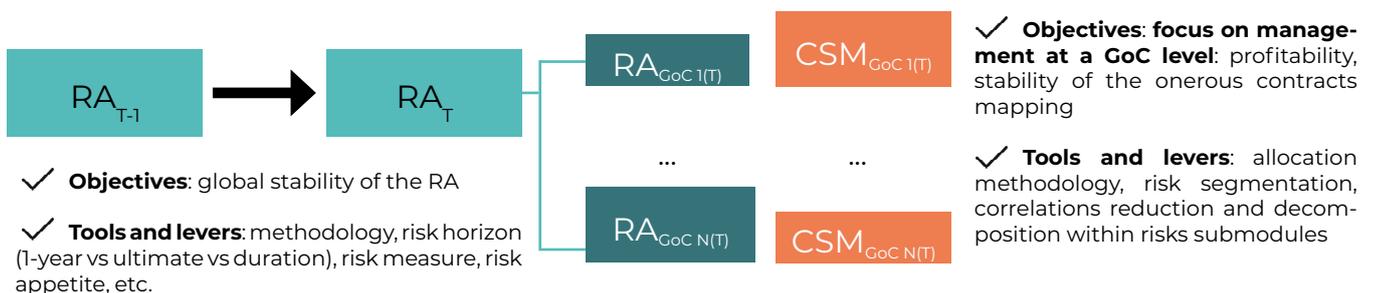


## Risk Adjustment: A lever for managing IFRS KPIs

The **management of IFRS KPIs** by the RA requires the prior definition of an expanded set of IFRS **management indicators** based on different **axes**: business, profitability, risk & variability, solvency...

The evaluation and allocation of the RA have to make it possible to control the **overall stability** of the IFRS balance sheet by **inertia of the consolidated RA** while offering the possibility of **targeted management** at a more **granular** level (e.g. at a Group of Contracts level).

Several **management levers** are possible, such as the **mapping of IFRS insurance risks**, the **techniques for allocating the RA** or the **adjustment of the correlations** considered.



# OPTIONS FOR REDUCING ACCOUNTING MISMATCHES OFFERED BY THE STANDARD

**The standard offers several options to minimize accounting mismatches and ensure a potential reduction in the volatility of the P&L.**

**It is thus possible to decompose the P&L item “Insurance Finance Expenses” and to affect its components in P&L and in OCI.** This enables a matching in the P&L between insurance finance expenses and the level of income and changes in fair value of assets (in accordance with IFRS 9).

**T**he standard indicates the decomposition method when the option is activated. It contains general guidance on this subject and specific instructions for direct profit-sharing contracts for which the insurer holds the underlying assets (called contracts without economic mismatch).

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## **General guidance: non-participating contracts and participating contracts not qualified as direct profit-sharing contracts**

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Changes in the value of Fulfilment Cash Flows (FCF) resulting from changes in the discount rate had initially to be recognised in P&L. However, a majority of insurers' financial assets are classified in the FV in OCI category. Thus, the initial accounting treatment between assets and liabilities was not consistent. It would have implied a potential P&L volatility in case of movement in market rates, reflecting an accounting asymmetry.

The OCI option, applicable at the level of each portfolio of contracts, was introduced to allow entities to have a symmetrical classification and treatment of assets and liabilities. It consists in disaggregating the Interest Finance Expense item of the P&L into two parts:

- Changes in FCFs based on the effective yield of the contract (for non-participating contracts, *effective yield* corresponds to the initial forward rate set at recognition period) are recorded in P&L.
- Difference between the variation of the FCF at the current market rate and that calculated at the effective rate is recorded in OCI.



This option smooths the effect of interest rate changes on the P&L but transfers volatility to own funds. It also requires a double calculation of liabilities that creates additional complexity in accounting production.

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### **Specific instructions: direct profit-sharing contracts for which the insurer holds the underlying assets («Direct Participating Contract») - CPBY (Current Period Book Yield) approach**

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These contracts require the VFA model, in which the CSM is adjusted to take changes in the economic environment into account. Thus, the change in the underlying assets is fully reflected in liabilities. The Interest Finance Expenses total is therefore equal to the total change in value (i.e. income + change in Fair Value) of the underlying assets.

The CPBY approach consists in making the Insurance Finance Expense item equal to the opposite amount of financial income related to the underlying assets. The residual interest expense is recorded in OIC (see § 89). This decomposition possibility avoid any accounting mismatch, by neutralizing the income from the assets.

# CSM and P&L

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# Assessment

## Conclusion

**The new standard concerning insurance contracts significantly modifies the presentation of the P&L. This evolution will mechanically change the financial communication efforts of the undertakings.**

IFRS 17 *Insurance Contracts* strongly changes the P&L account, and will thus have impacts in financial communication. To ensure consistency with the existing frame of reference (Local GAAP, Solvency 2, etc.), (re)insurance companies shall overcome its complexity and understand how profits emerge in this new accounting model.

### NEW ACCOUNTING MODEL

Between two closings, the BE variation is analyzed and its components are recorded in P&L, OCI or CSM according to their nature. However, it requires a huge amount of data and triggers an additional complexity to the IFRS accounts closing process. Additionally, actuarial models are mandatory in such a process, and become more and more complex. Actuaries will thus have a leading role in the analysis and explanation of IFRS accounting P&L.

### VOLATILITY

The economical view of insurance liabilities rises difficulties related to potential volatility induced in P&L. The variability of technical provisions indeed increases, since calculations are done with regularly updated assumptions (financial assumptions in particular). The accounting mismatches also bring additional volatility in the P&L account.

In order to adress these drawbacks -and since the volatility has an economical meaning and should not be ignored-, the IASB introduced two main mechanisms:

- The CSM, which is adjusted based on the increase or decrease of future profits,
- The OCI option and the CPBY approach in order to reduce accounting mismatches.

### LEVERS

Other management levers affecting the average and volatility of IFRS17 P&L have been identified. The actuaries will be able to use them in order to monitor their results (coverage units choice, RA calculation, etc.). These levers shall be simulated in order to lead structuring decisions before the IFRS 17 standard application date.

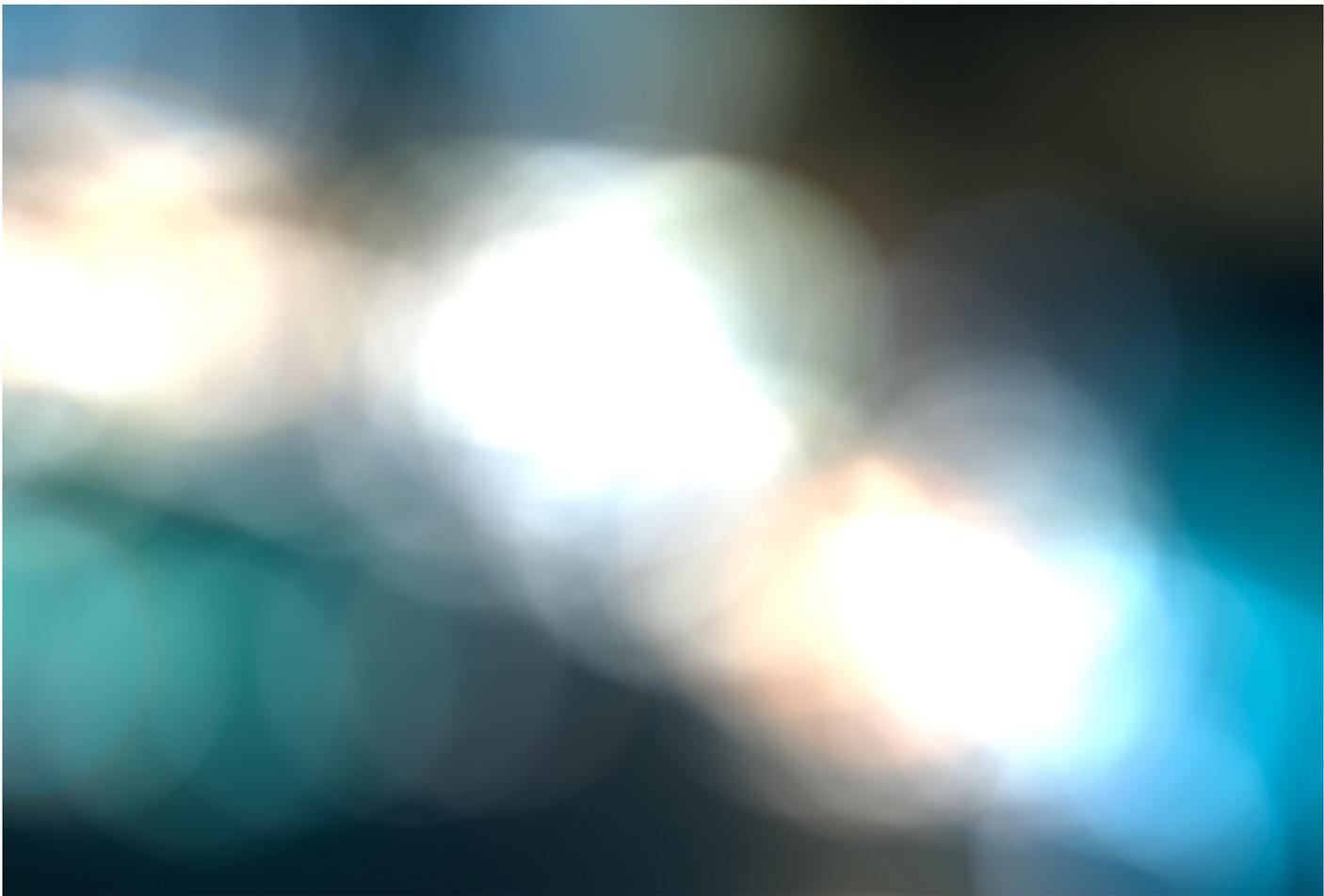
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