



EXPERTS' PAPER

IFRS 17

MULTI-STANDARD RECONCILIATION: SOLVENCY II – IFRS 17 COMPARISON AND P&L TRANSITION FROM IFRS 4 TO IFRS 17

The IFRS17 standard, effective from 1st January 2023, creates a major evolution in the reading and interpretation of the financial and accounting results of the insurance and reinsurance companies it applies to. To analyze the results, a comparison with other accounting or prudential standards helps to interpret and understand the new concepts.

In this paper, we present a multi-standard interpretation by comparing Solvency II and IFRS 17 liabilities as well as IFRS 4 and IFRS 17 income statements.

The main difference between the standards lies in the chosen approach: Solvency II is a prudential standard designed to ensure sufficient capital for insurance companies; IFRS 4 and IFRS 17 are accounting standards:

- The former establishes a framework with defined risks and contracts for Insurance businesses, that enables a first valuation of liabilities without mandatory consistency between countries.
- The latter, IFRS 17, seeks to harmonize the valuation and presentation of insurance, reinsurance and investment contracts with discretionary participation, facilitating the interpretation and the comparison of financial statements.

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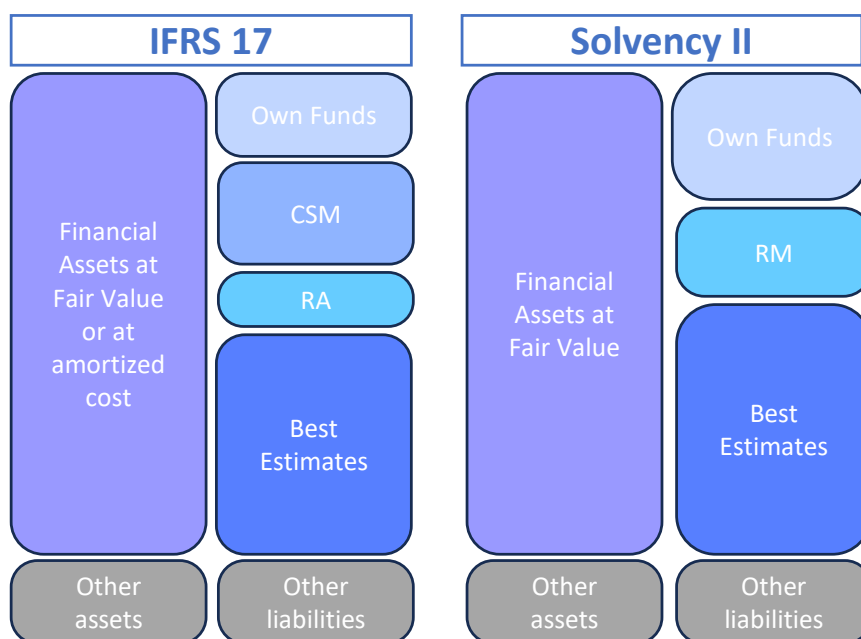




1. SOLVENCY II AND IFRS17 BALANCE SHEETS

In our paper, we have conducted an analysis using data from EIOPA's latest report on the Implementation of IFRS 17 & its synergies and differences with Solvency II ¹. This document compiles the results from a survey conducted on the Q2 2023 financial statements of a panel comprising 53 financial groups across 17 EU member states (out of 121 groups subject to IFRS 17 globally).

Solvency II liabilities consist of a Best Estimate ("BE"), a Risk Margin ("RM") and net assets. In contrast, under IFRS17, liabilities are broken down into a BE, a Risk Adjustment (referred to as "RA"), a Contractual Service Margin (referred to as "CSM") and shareholders' equity. The challenge in reconciling those liabilities lies in understanding the differences between these balance sheet items and rationalizing changes in equity between the two standards.



As a reminder, insurance contracts are valued using 3 models under IFRS 17:

- The general measurement model: also referred to as the Building Block Approach (BBA); this is mainly used for protection products.
- The PAA (Premium Allocation Approach); this is employed for property & casualty as well as health insurance. It is worth noting that 90.4% of the non-life insurance market among the panel uses this method.
- The VFA (Variable Fee Approach); this applies to pension products or participating contracts, with 86.4% of the life insurance market among the panel adopting this method.

¹ [Report on the implementation of IFRS 17 - Insurance contracts - European Union \(europa.eu\)](https://eiuropa.eu/report-on-the-implementation-of-ifsrs-17-insurance-contracts-european-union)

1.1. BE SII vs BE IFRS 17

Under both Solvency II and IFRS 17, the Best Estimate corresponds to the economic value of technical reserves. It corresponds to the best estimate value of future insurance flows discounted at the risk-free yield curve. This complies with the *Market Consistency* principle which ensures that insurance liabilities are valued in a way consistent with the market, making calculation methods comparable across different insurance companies.

The differences in insurance liabilities valuation between the two standards is in the calculation components:

- Contract boundaries
- Future costs valuation
- Homogeneous groups of contracts
- Discount rate curve

Contract boundaries

IFRS 17: The recognition date corresponds to the earliest date between the first premium payment and the beginning of insurance coverage. All cash flows related to the contracts are projected for as long as the insurance company can request the payment of premiums or must deliver the service.

Solvency II: All cash flows are projected from the date of commitment to the point at which the insurer has the unilateral option to terminate the contract, reject or modify the premiums or benefits payable. This ensures that the premiums fully reflect the risks.

For instance, single, non-recurring, premiums are included in the BE's calculation under IFRS 17, whereas they are not considered under Solvency II.

Future costs valuation

Under IFRS 17, only costs attributable to insurance contracts are projected to the end of the contract portfolio. Non-attributable costs are recognized as non-technical income or expense in the insurance company's comprehensive income.

Under Solvency II, all future costs are considered in the BE through cash flow projections.



Homogeneous groups of contracts

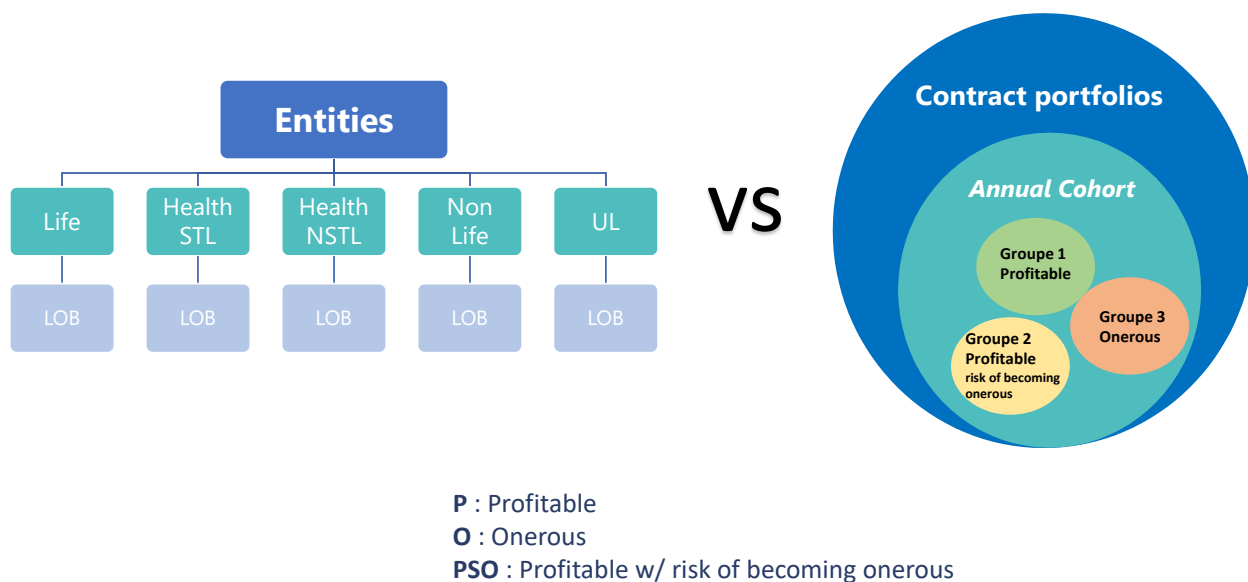
Under IFRS 17, calculations are made for homogeneous groups of contracts, with a clear separation between:

- Onerous contracts
- Profitable contracts with a significant possibility of becoming onerous over the contract’s lifetime
- Other profitable contracts

The onerousness test must be carried out at each closing period.

Groups of contracts must also reflect the same risk and include contracts underwritten over a maximum interval of one year (annual cohort principle), except for savings products in the European Union, for which insurers have the option of pooling cohorts ².

Under Solvency II, BE calculations are carried out by homogeneous risk group. The results are then aggregated by line of business (known as "LoB"), summarizing the main lines of insurance: Life, Non Life, Unit Linked, Health similar to life, Health non similar to Life.



² [Commission Regulation \(EU\) 2023/ of August 13, 2023 adopting certain international accounting standards in accordance with Regulation \(EC\) No 1606/2002 of the European Parliament and of the Council \(europa.eu\)](#)

Discount curve

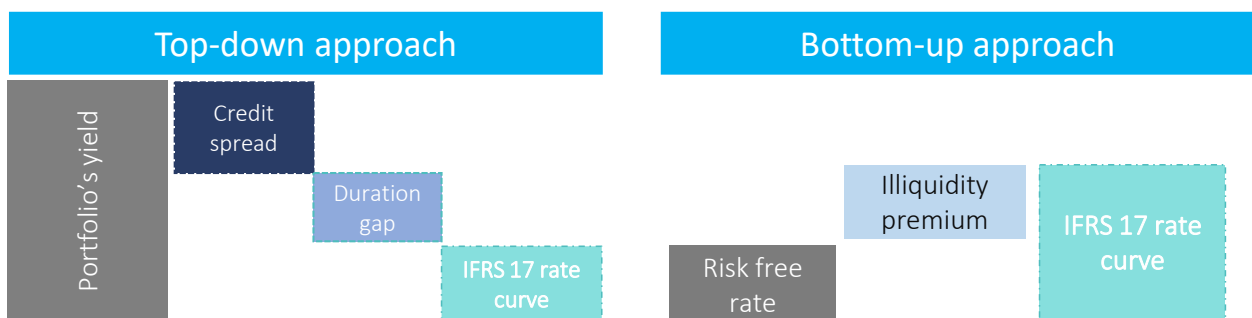
The BE is discounted using a risk-free curve, to which a premium or adjustment may be added to reflect market conditions. The build-up of the curve may differ depending on the standard.

Under IFRS 17, each insurer must build its own yield curve, known as an "entity-specific" discount curve. Two approaches are possible:

- Top-down: a portfolio risk premium is deducted from the asset yield curve (allowing for credit spreads, differences in durations with liabilities, etc.).
- Bottom-up: an illiquidity premium is added to the risk-free curve, that corresponds to the liquidity gap between the underlying assets and liabilities.

Effectively, insurance companies invest in financial assets with characteristics similar to their underlying liabilities (maturity, liquidity, currency). The IFRS illiquidity premium therefore captures the excess return associated with differences in liquidity between the invested assets and the financial instruments underlying the calculation of market rates.

Such an approach considers all market risks (equities, interest rates, real estate, etc.) and is calculated by each market player using its own internal method. The European market predominantly opted for the second method, with over 75% of the EIOPA's panel choosing to align more closely with the Solvency II yield curve construction method.



Under Solvency II, the risk-free rate curve (RFR) is published by EIOPA and prescribed for all insurance players. The final curve is constructed using a bottom-up approach. For long-dated business, a Volatility Adjustment (VA) is added to the RFR curve, reflecting the level of short-term spreads. This adjustment is calculated by EIOPA based on a portfolio of financial assets reflecting the European insurance market.



In both standards, beyond a defined illiquidity point (Last Liquid Point, or LLP, set by EIOPA at 20 years for France), the yield curve tends toward a long-term rate (Ultimate Forward Rate, or UFR). This rate, published by EIOPA for Solvency II purposes, has also been adopted by European market players for extrapolating the IFRS 17 curve.

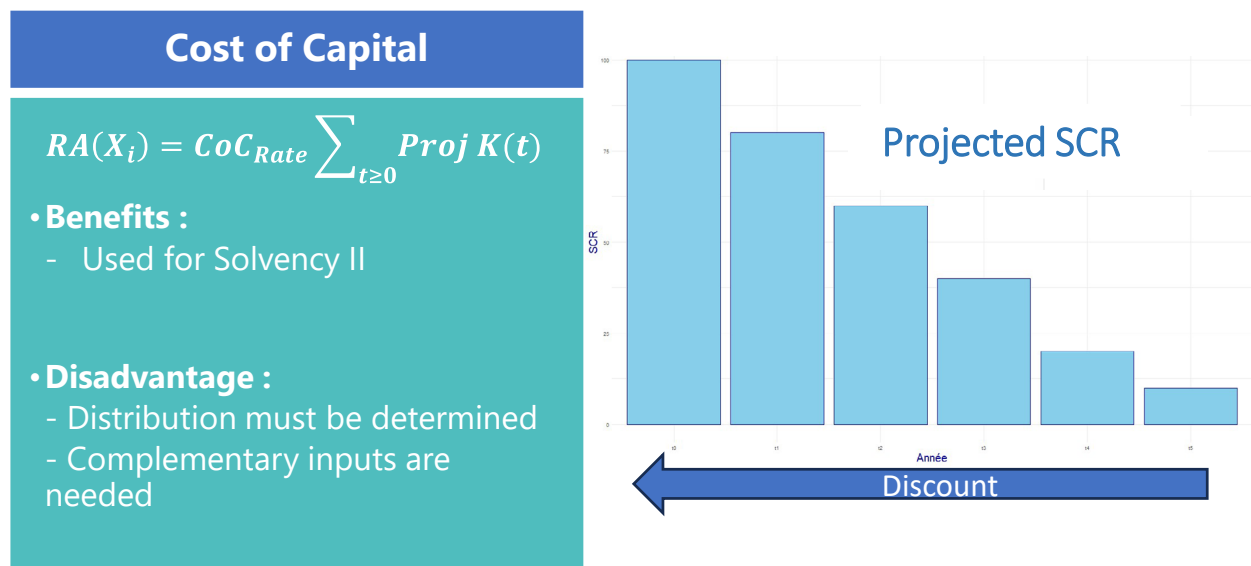
Note that, under Solvency II, following the 2020 review, certain elements will change in the yield curve extrapolation and in the calculation of the volatility adjustment. See the Expert Paper on the 2020 Review of the Solvency II Directive, written by Addactis ³.)

1.2. Risk Margin and Risk Adjustment

The Risk Adjustment, developed under IFRS 17, addresses the uncertainty associated with the payment of future cash flows related to non-financial risks over the commitment's lifetime. Since IFRS 17 does not prescribe specific techniques, several calculation methods can be considered, as illustrated by various market players:

- **Cost of capital:**

- **Simulation approach** based on discounted cashflows: this method enables insurance companies to use the existing framework for the SCR calculation under Solvency II. Under this approach, the RA is calculated using a cost-of-capital rate set by the insurer.



³ [2020 review of the Solvency Directive \(addactis.com\)](https://www.addactis.com/2020-review-of-the-solvency-directive)

- **Adjustment of Solvency II parameters:** The RA is calculated using a shock for non-financial risks to the Best Estimate. The Solvency II parameters are adjusted according to the length of commitments, confidence level, volumes, and granularity.

47% of the EIOPA panel have chosen the Cost of Capital method, with the majority adjusting some of the parameters.

By shock

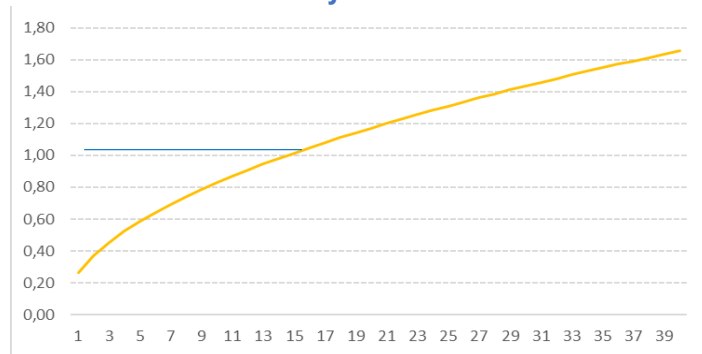
$RA(X_t) = Adj(horizon, etc) \times SCR$

- Benefits :**
 - Used for Solvency II
- Disadvantages :**
 - Requires assumptions to justify
 - Results will be more volatile than the one from the VaR method

Adjustment factor for confidence level and risk horizon

$$\Delta IFRS_{x,t} = \frac{q_\alpha}{q_\beta} \sqrt{t} \cdot \Delta S2_{x,t}$$

S2 shock adjustment factors



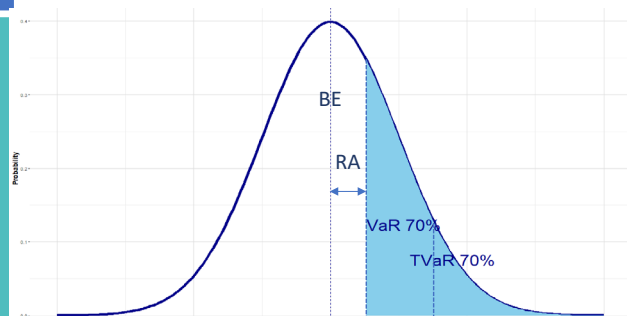
▪ Example: Adjustment factor profile for $\alpha = 75\%$ and $\beta = 99,5\%$

• **The VaR or TVaR approach:**

- **The simulation approach** uses calibrated parameters aggregated with a parametric distribution. this method is based on a distribution using simulations. The entity values the RA by calculating a risk measure, such as VaR or TVaR, from this stochastic distribution.

60% of EIOPA's panel has chosen the VaR approach while only 2% uses the TVaR one.

Value at Risk	Tail Value at Risk
$RA(X_t) = VaR_\alpha(X_t) - BE(X_t)$	$RA(X_t) = TVaR_\alpha(X_t) - BE(X_t)$
<ul style="list-style-type: none"> Benefits : <ul style="list-style-type: none"> - Easy to analyze - Frequently used in Insurance Disadvantages : <ul style="list-style-type: none"> - Non consistent Risk valuation (under additivity) - High volatility 	<ul style="list-style-type: none"> Benefits : <ul style="list-style-type: none"> - Consistent Risk calculation - Better than VaR because includes skewness Disadvantages : <ul style="list-style-type: none"> - More difficult to analyze than VaR method - Even above significant quantile



Under Solvency II, the Risk Margin represents the cost associated with holding regulatory capital to support liabilities until their run-off.

In practice, the method consists in calculating the SCR for the underwriting, the operational and the default (reinsurer's) risk modules until the portfolio is extinguished.



The formula to calculate the RM is as follows:

$$RM = 6\% \cdot \sum_{t \geq 0} \frac{SCR_{Ru(t)}}{(1 + r_{t+1})^{t+1}}$$

With:

SCR_{Ru} = SCR calculated on selected risk modules

r_{t+1} = the risk-free rate at time $t+1$

In the 2020 review of the Solvency II directive, the cost of capital, previously set at 6%, is lowered to 4.75%, and an exponentially decreasing parameter has been introduced over time to reflect changes in risk.

1.3. CSM

The **CSM** represents the present value of future margins over the term of the commitment and is calculated for each homogeneous group of contracts. This component of insurance liabilities does not have an equivalent under Solvency II. However, it can be compared with the Value in Force ("VIF"), which corresponds to the present value of future profits on the existing portfolio. This metric is frequently used to value insurance portfolios in the context of mergers and acquisitions.

1.4. Shareholders' equity

Under IFRS, insurance company shareholders' equity includes three main items:

- Own funds
- Net income
- The OCI (Other Comprehensive Income) reserve

In an economic view of the balance sheet, changes in the valuation of financial assets and technical liabilities must be recognized either in the P&L or in the balance sheet. This creates a high degree of volatility, as these changes flow through the income statement. To mitigate this effect, IFRS provides for the OCI reserve.

The OCI reserve is used to record unrealized gains and losses ("URGL") on financial assets classified at Fair Value by OCI (known as "FV OCI") under IFRS 9. This already existed under IAS 39.

Under IFRS 4 phase 2, technical liabilities were recognized at amortized cost, and the valuation of financial assets under the economic view was offset by the shadow accounting method. This consisted in recognizing a deferred profit-sharing reserve reflecting unrealized capital gains and losses on financial assets, prorated to the portfolio's profit-sharing rate (85% of financial income net of expenses in accordance with regulations).

Under IFRS 17, technical liabilities are viewed in economic terms, and the shadow accounting method no longer applies. The OCI reserve now plays a new absorption role: depending on the options chosen by market players, changes in insurance liabilities can be transferred to OCI.

Under BBA and PAA, the OCI option involves transferring to OCI the impact of changes in the yield curve (between the locked-in rate and the current rate) on BE and RA. However, CSM unwinding impacts continue to go through P&L, like the "Non OCI" option.

In the VFA model, changes in BE and RA resulting from changes in financial assumptions are partially offset by financial income and by the URGL of the underlying financial assets recognized at FV through P&L. The aim of the OCI option in VFA is to eliminate any accounting mismatch between the URGL of the underlying financial assets recognized at FV OCI or amortized cost, and the change in insurance liabilities that pass-through P&L. To achieve this, the difference between the financial result of the underlying assets and the financial result of the insurance liabilities is transferred to OCI, effectively resulting in a null insurance financial result. Last, the impact of unwinding on BE, RA and CSM continues to be included in insurance income, as in the "non OCI" option. Globally, when the insurers own financial assets accounted at FV OCI, 61% activate the OCI option in PAA, 73% in VFA and 79% in BBA.

Under Solvency II, a distinction is made between **core and non-core capital**:

- **Core capital:**

- (+) Shareholders' equity
- (+) Capitalization reserve
- (+) Subordinated debts
- (-) treasury shares

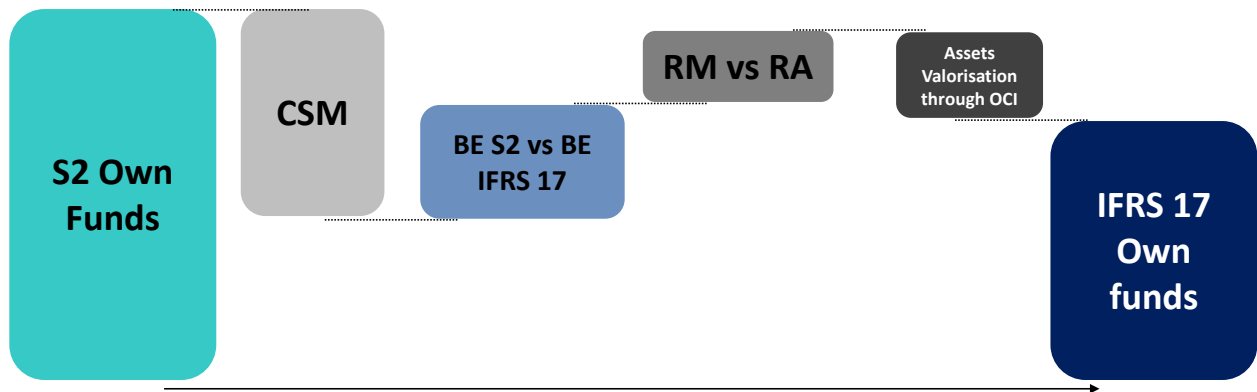
- **Auxiliaries:**

- Uncalled subscribed capital
- Subscription reminders
- Letters of credit
- Any other commitments received



They are divided into 3 tiers, depending on the loss-absorbing capacity of the capital element, and their eligibility for SCR and MCR coverage depends on their tier.

In conclusion, here is a simplified diagram showing the main impacts between SII prudential capital and IFRS accounting capital:



Liability elements, such as CSM, BE SII vs BE IFRS 17, RM vs RA, and OCI, can explain the shift in equity from Solvency II to IFRS 17. Other factors, such as deferred taxes and subordinated debt, may also create discrepancies in equity under the two standards.



2. IFRS 4 AND IFRS 17 INCOME STATEMENTS

IFRS 17 introduces a new approach to evaluating both insurance and reinsurance contracts.

In the general model, the most significant change compared to IFRS 4 is the shift from assessing results based on actual cash flows and changes in reserves to profits and risks flows, estimated using actuarial modeling and experience adjustments.

Technical results (including underwriting and administrative components) are transformed into insurance income and services. The financial result encompasses all financial income and expenses.

Depending on the IFRS 17 model (VFA, BBA or PAA), there are notable changes in earnings components, of which:

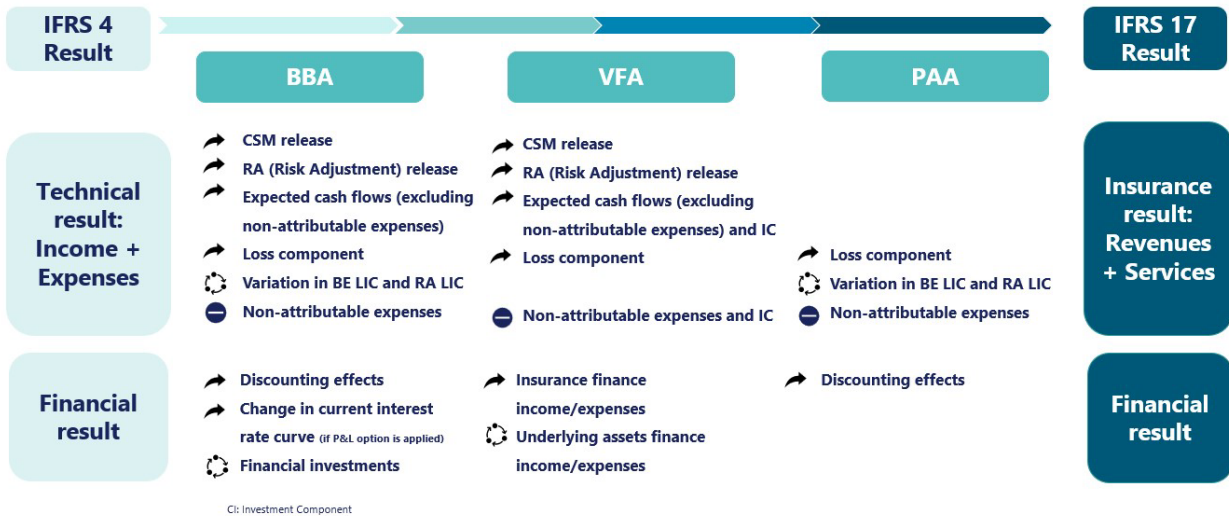
- Earned premiums are no longer posted directly to the income statement for the BBA and VFA models.
- New components emerge, including CSM amortization, RA release, change in loss components as well as expected model flows (excluding non-attributable costs and investment component) for BBA and VFA models.
- Recognition only of attributable costs in IFRS 17 income.
- Economic valuation of reserves through consideration of the time value of BE LIC and RA LIC for BBA and PAA.
- Unwinding impact for BBA and PAA models (Locked-in discount rates).
- Changes in yield curves on financial income when the OCI option is not activated for the BBA and PAA models.
- A different financial impact in VFA compared with IFRS 4, with the economic valuation of insurance contracts under IFRS 17 and the switch from IAS 39 to IFRS 9 valuation of insurance assets, thus reducing the asset/liability mismatch. The management of this mismatch is no longer based on the principle of shadow accounting, but on the possibility to activate an OCI option depending on the classification of the underlying assets.



Evolution of the Income Statement from IFRS 4 to IFRS 17



Major changes



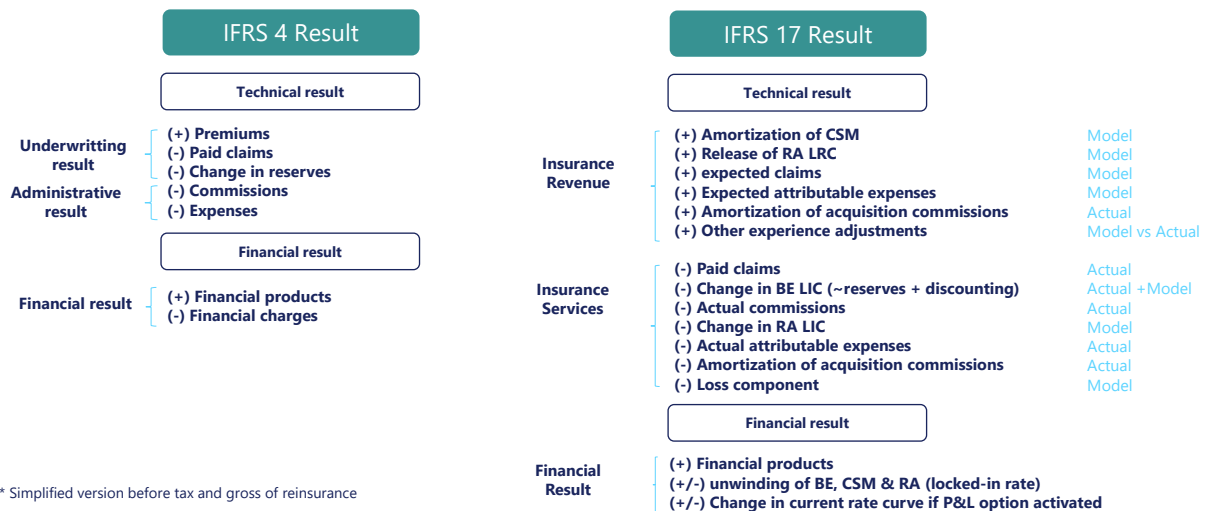
We present comparative analysis below for the BBA, VFA and PAA models.

The main difference between the BBA and VFA models lies in the way financial impacts are recognized. For products modeled in BBA, the CSM is estimated at the locked-in rate, and all financial impacts linked to market variations and current rates affect the income statement and shareholders' equity. For the VFA model, current financial impacts and investment components have a direct effect on the CSM.

Another difference lies in the recognition of a BE for current and past services in BBA (LIC), which is not represented for the VFA model.

2.1. BBA

This section provides a comparison of income statements within the framework of the general model.

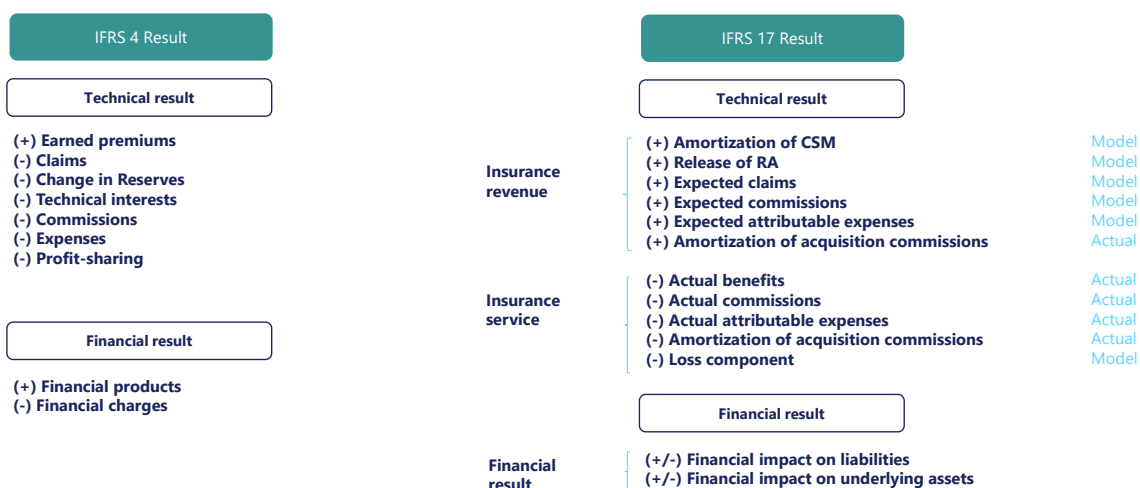


An analysis of the two income statements shows the following:

- IFRS 17 introduces new indicators: recognition of the CSM, release of the RA and change in the loss component.
- Non-attributable costs are excluded from IFRS17 modeling and results. They are recognized in comprehensive income, outside IFRS17's scope.
- Except for non-attributable expenses, the IFRS17 insurance P&L includes the actual cashflows of current and past events, either directly in insurance services (claims, commissions, attributable expenses) or indirectly in experience adjustments (premiums and acquisition costs).
- The change in LIC is comparable to the change in reserves linked to incurred claims with a discounting impact under IFRS17 (through locked-in discount rates).
- Commissions and acquisition costs have no impact on IFRS 17 P&L, as they are neutralized by the amortization recognized in both expected and current cashflows.
- The discrepancy between the two standards may largely come from a difference between the new indicators modeled:
 - **(CSM recognized + RA released) - expected cashflows**
 - **Loss component**

2.2. VFA

This section compares the income statements under the VFA model applicable to direct profit-sharing contracts.



* Simplified version before tax



An analysis of the two income statements reveals the following impacts:

- Under IFRS 17, premiums, changes in French GAAP reserves and Profit sharing no longer appear directly in the income statement.
- Instead, the results are driven by the amortized CSM and the released RA. Both **financial** and non-financial **impacts** are **reflected in the CSM**.
- The difference between IFRS 4 and IFRS 17 may be attributed to the pace at which the CSM is released, impacted by the choice of investment component, underlying items and Coverage Unit.

The components of a VFA contract must indeed be distinguished into an insurance component and an investment component; the amortization rate of the CSM is estimated based on a Coverage Unit measuring the service to be due over each financial year. The choice of these indicators is unrestricted, if it complies with the definitions set out in the standard and may create a discrepancy with the IFRS4 result.

- Non-attributable costs are excluded from the IFRS 17 modelling and insurance result.
- The **classification of underlying financial assets (IFRS 9)** can create **volatility** in the P&L.
- The **OCI option** coupled with FVOCI assets can allow compensating the financial impact.

The gap between IFRS 4 and IFRS 17 may vary from one insurer to another, depending on the **methodological choices made under IFRS 17**, the **classification of assets under IFRS 9** and the management of asset/liability mismatches (**OCI/P&L option**).

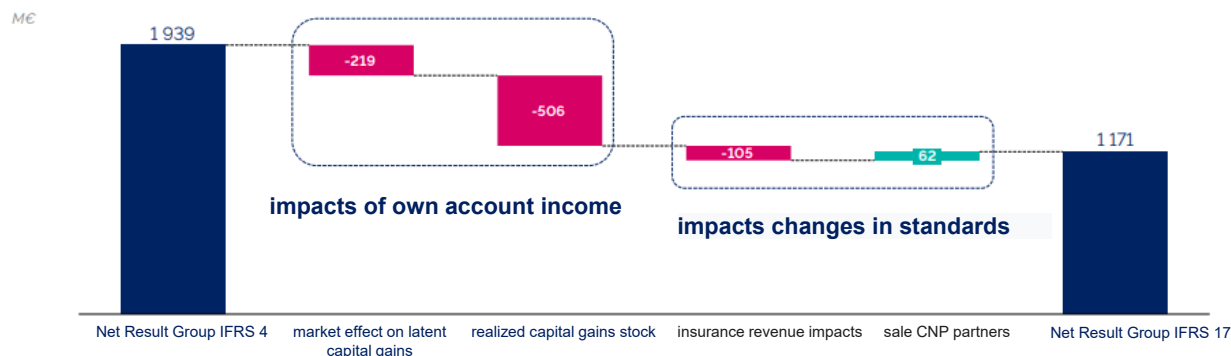
To illustrate the analyses of the VFA and BBA income statements, we have included the first IFRS17 figures published by a few players.

Example 1: in 2022, CNP's insurance liabilities are modeled as 95.6% VFA, 4.1% BBA and 0.3% PAA. The reconciliation of Q4 2022 result between IFRS 4 and IFRS 17 decreases by €0.8bn, corresponding to:

- An impact on income from **Own funds** of €(0.7) bn, with €(0.5) bn of URGL on shares recognized under IFRS 4 but not IFRS 17 and € (0.2) bn of URGL on assets recognized under IFRS 17 but not IFRS 4.

The main changes are due to the recognition of financial impacts (P&L/OCI) under IFRS 17, with asset classifications evolving between IAS 39 and IFRS9.

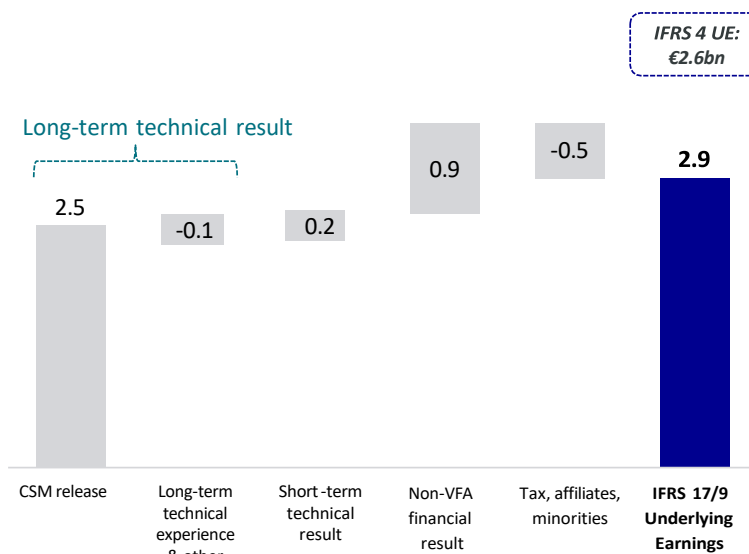
- An impact from the **change of standards** of €(0.05) bn with €(0.1) bn due to changes in "economic indicators under IFR17" (increase in interest rates, inflation, decrease in the value of equities) and +€0.05bn from "a revaluation of realized gains" on transition.



Source : CNP 2022 annual results - IFRS9 and IFRS17 standards

Example 2: The Q4 2022 result AXA Life increases by €0.3bn between IFRS 4 and IFRS 17. This change is explained, in AXA's publication, mainly by:

- A **"technical result"** of €(0.1)bn, with non-significant experience adjustments and a robust model between recognition of CSM, expected and current cashflows.
- A **"financial impact (excluding VFA)"** of €0.9bn, due to the unwinding at the locked-in rate and financial income.
- Other impacts of €(0.5)bn.

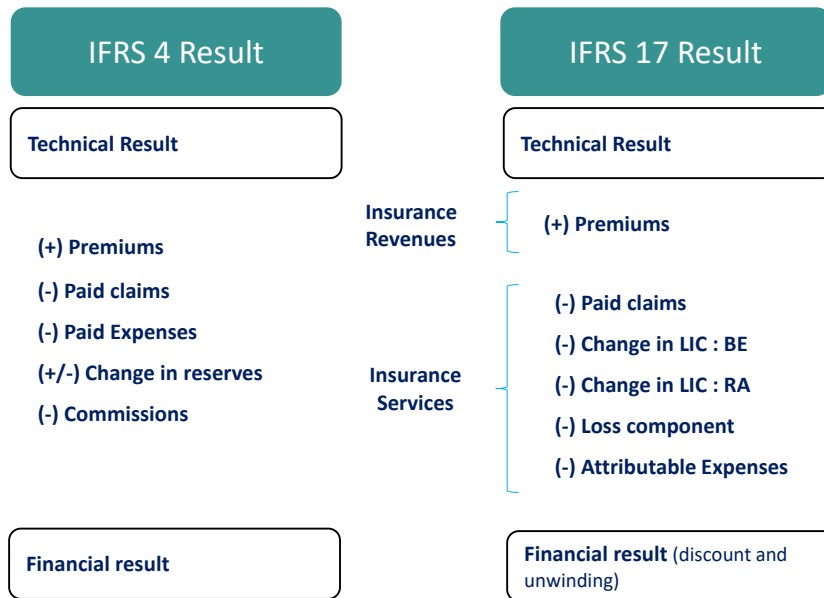


Source : AXA 1Q 2023 Activity Indicators Presentation



2.3. PAA

The PAA model simplifies insurance income calculations, facilitating reconciliations with IFRS 4. However, discrepancies may occur in insurance expenses, particularly when prudential margins are not consistent between the two approaches.

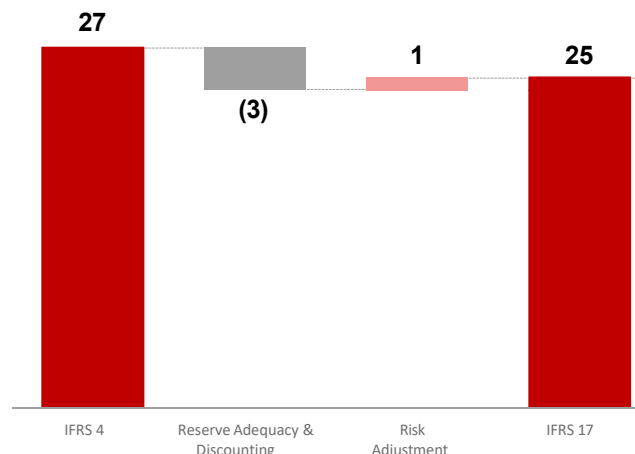


In the PAA model, earned premiums under French GAAP and insurance revenues under IFRS 17, are identical on a like-for-like basis.

Paid benefits are similar under both standards; however, claims handling expenses may differ due to the attributable rates under IFRS 17. When these rates equal 100%, the expense amounts are identical.

Changes in claims reserves under French GAAP correspond to changes in LIC BE and LIC RA under IFRS 17. However, depending on the prudential level applied under French GAAP and the selected quantile under IFRS 17, these two amounts may differ.

To illustrate the reconciliation of amounts between these two methods, it is possible to separate the impacts of changes in prudential margins:



Source: Generali investor update 13/12/2023

- For future recognized losses, IFRS 17 must recognize the loss component (LC), but this concept does not exist under French GAAP. However, if the loss ratio of previous years exceeds 100%, the insurer must recognize an unexpired risk reserve. This is used to cover any shortfall between premiums and expected claims.

The calculation formula for this reserve is as follows:

$$\text{Unexpired risk reserve} = \max (\text{loss ratio} - 100\%, 0) \times \text{unearned premium}$$

The loss ratio is based on the last two occurrence years and it is calculated as follows:

$$\text{Loss Ratio} = \frac{\text{Claims} + \text{Fees}}{\text{Earned premiums}}$$

Source : Non-life insurance claims reserving guide (French “Institut des Actuaire”)

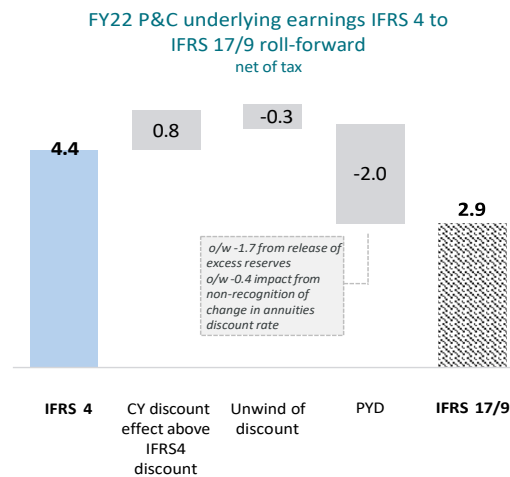
In a scenario with significant variations in the yield curve, activating the OCI option allows for the isolation of yield curve related effects. However, the impacts of discounting and unwinding may still result in variations between IFRS 4 and IFRS 17.

Players can opt to isolate these discounting effects in their calculations. Two examples are as follows:

CoR IFRS 4 to IFRS 17 walk	2022
Reported CoR IFRS 4 (IFRS 4 formula)	93.2%
Restatement for formula and expenses	1.7%
Restated CoR IFRS 4 (IFRS 17 formula)	94.9%
CoR impact (a+b)	0.5%
<i>CoR Undiscounted (a)</i>	2.7%
<i>Discounting impact (b)</i>	-2.1%
CoR under IFRS 17	95.4%
CoR undiscounted under IFRS 17	97.5%

Source : GENERALI IFRS 17/9 GROUP RESULTS 2022 COMPARATIVES

Generali calculates the non-discounted combined ratio (CoR) and assesses the discounting impact under IFRS 4, to reconcile it with IFRS 17.



Source : AXA 1Q 2023 Activity Indicators Presentation

AXA assesses the impact of discounting on earnings in accordance with IFRS 4 and calculates the unwinding effects to determine earnings in accordance with IFRS 17.

CONCLUSION

The implementation of IFRS 17 represents a revolution in the way insurance and reinsurance companies assess and present their financial results. This standard differs significantly from both Solvency II and IFRS 4.

The insurance sector is, by definition, difficult to compare with other sectors of the economy, due to its reversed production cycle. In drafting IFRS 17, the IASB's aim was to simplify comparability by showing annual profitability through the amortization of CSM.

However, the introduction of IFRS 17 also brings new accounting concepts and models that required to be understanding and mastered.

The aim of this paper was first to explain the differences between the Solvency II and IFRS 17 balance sheets, to identify common elements and explain the transition of shareholders' equity between the two standards.

In the absence of a Solvency II income statement, the P&L have been reconciled between IFRS 4 and IFRS 17 and by accounting model. The VFA and BBA models are the most complex, and differences may vary from one insurer to another depending on IFRS 17 methodological choices. On the other hand, the reconciliation between IFRS 4 and IFRS 17 under the PAA model is simpler, as it is close to French GAAP practices.

To conclude, the implementation of IFRS 17 requires not only a reassessment of accounting methods, but also a tailored approach to fully understand the implications of this normative transition.



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