

# Transition: MRA or FVA for recent new business?

To fair value or not to fair value, that's the question.

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## The question: MRA or FVA?

A new IFRS standard usually requires a first application where it is assumed that the new standard had always existed already. For long term contracts under IFRS 17, this is practically an impossibility because it requires to retrace the evolution for every group of contracts between their underwriting year and the transition date.

This demands the use of earlier, historical assumptions about future cash flows, to combine them with actual cash flows (at the group of contract level) that occurred, and without forgetting all contracts that were initially in that group but have already expired since then.

The IASB has acknowledged this very significant challenge and therefore allows insurers to take a more practical stance if such a full retrospective approach (FRA) is impracticable. One then has the choice to use a shortcut modified retrospective approach (MRA) or a fair value approach (FVA).

## MRA

Under the MRA, we also go back to the underwriting year of the contracts, but:

- we are only considering the contracts that are still in force.
- We also can assume that the current assumptions have always been in place; and that,
- for periods between inception and transition date, the originally expected cash flows were identical to the actual cash flows that we observed (see Appendix C of IFRS 17). These can include the cash flows from contracts that are no longer in force, to avoid the necessity of filtering them out.

Although the MRA is seeking to follow the FRA in principle, and is simpler than the FRA, its use still may present challenges.

## FVA

The FVA however is quite different. Here, the IASB allows to use the notion of "fair value" from IFRS 13 to be applied on the insurance contracts at the transition date. The principles in IFRS 13 for a fair value approach are different from those for a fulfilment approach under IFRS 17 and can lead to differences in best estimate cash flows, discount rates and adjustments for risk. First of all, it is a prospective approach, so that not history about the existing business is required. Second, the IFRS 13 fair value is an "exit value" concept, where insurance contracts are considered in the context of a market transaction. In such a situation, it is not unusual to expect that market participants would require and accept an additional profit margin on top of the neutral compensation provided by the risk adjustment only.<sup>11</sup> Hence there are challenges in using the FVA too.

Given that challenges exist for both the MRA and the FVA, the question then arises as to which of these two alternatives to the FRA to use. Especially for recent new business, where applying the MRA is not going too far back in time, both seem to be valid options. The main requirement to model either option is that the actual cash flows in recent years are known at the group of contracts level.

We therefore asked ourselves: What would be the difference between these alternatives to the FRA when considering new business written in the years just prior to the transition to IFRS 17?

Is there a significant difference in the operational execution of these methods or in the initial presentation of these contracts under IFRS 17 and, if yes, why? Or would we observe that the differences are not important, thus making it easier to consider the question as irrelevant?

<sup>1</sup> See also "IFRS 17 Fair Value Approach to Transition", John Jenkins, Dilesh Patel, Milliman

## Approach

Looking at the issue in practical terms, we considered some real-life cash flow projections and adopted an approach that we often discuss with clients for whom practicality is a criterion when adopting IFRS 17.

This approach follows closely the valuation principles of Solvency II. We then apply the same Cost of Capital method for the IFRS 17 Risk Adjustment and use the EIOPA-given discount rates. The latter seems acceptable as we observe that some companies have already indicated they will be using the Solvency II Volatility Adjustment (which can be either a market or entity specific parameter) and the Solvency II ultimate forward rate in their IFRS 17 methodology. As such, the IFRS 17 valuation is basically the same as Solvency II.

We use the same best estimate assumptions as for Solvency II, but we restricted ourselves deliberately to contracts where the contract boundaries are exactly the same as in IFRS 17.

In actual IFRS17 exercises, we usually adjust expense levels (as some expenses are out of scope for IFRS 17), discount rates and the Risk Adjustment level, but to answer the question posed in this article, we ignore these adjustments and keep all items the same as in Solvency II.

The difference between MRA and FVA in the nature of the required calculations is this way kept to a minimum and basically comes from:

- The difference in discount rates, arising from the use of discount rates at the transition date only (FVA) as compared with the use of discount rates from the underwriting period and then the roll-forward to the transition date (MRA);
- The profit margin additionally included in the FVA, to reflect the profits or margin that a market participant may require. This can for instance include an additional compensation for risk or for risks not included in the Risk Adjustment.

For completeness, we also point out that for simplicity we ignored in this article the link with the underlying assets and how they are treated under IFRS 9.

## Simulation with Milliman Mind®

We used Milliman Mind® to perform the transition runs in our example portfolio. Milliman Mind® is a cloud-based software system that offers a full IFRS 17 calculation engine. It is being used by several insurers as their main IFRS 17 software system, and is also being used by several insurers as a shadow model to validate and check the outcome of their main IFRS17 software system. Milliman Mind is highly transparent and hence a good fit for this purpose.

We also used it here as a shadow model, because it allows us to just drag and drop the required input into the model and then just push calculate to get all requested results and disclosures.

Handy features are also that we do not have to roll forward discount rates ourselves, and that the path-dependent evolution of the CSM in the MRA is being calculated in one go.

## Outcome

Both the MRA and FVA methods were applied on recent new business only. For MRA we found no practical issues to produce results with Milliman Mind®, as soon as the extra required input, i.e. historical actual cash flows since inception date, was made available. The MRA is then only a matter of doing runs over consecutive reporting periods and updating the CSM in line with the standard.

As mentioned, we stayed for the FVA close to the IFRS 17 approach by just changing the perceived level of profits that a market participant may require at the transition date. From an operational perspective, we again did not observe any significant difficulties to run the FVA in this way.

Apart from this operational aspect, we came across some unexpected observations on the results, which seem to depend on the level of profitability that is implicitly included in:

1. The initial pricing approach for the insurance contracts.
2. The intended level of Risk Adjustment under IFRS 17.
3. The intended profit target under the Fair Value Approach.

When different methods or profitability targets are being used in the historical pricing of the insurance business and the FVA calculations, and depending on the level taken for the Risk Adjustment in the MRA, some deviating results may come out for the CSM at transition.

The following tables show different relative positions of the level of profitability, as used in the above three measurement frameworks for insurance contracts. We show different relative positions of total liabilities in the pricing approach and the fair value approach used by the company, as well as the IFRS 17 Risk Adjustment.

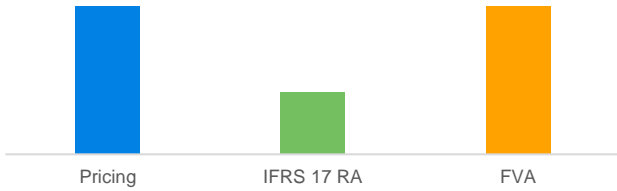
On the one hand, we have that a difference in pricing profits and Risk Adjustment will determine how much there will be left in the MRA for an additional CSM on top of the Risk Adjustment.

On the other hand, the level of profits that the entity thinks should be used in the FVA, will determine how at transition the business will show profitability compared to both the pricing method and IFRS 17.

## Required profits in excess of best estimate

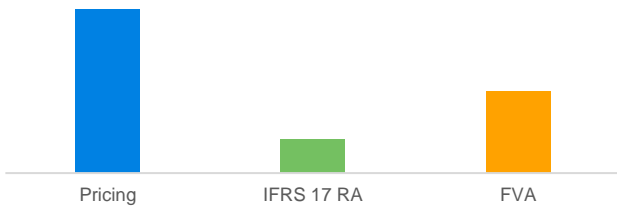
**A normal situation** would be that the entity pricing method is similar to market Fair Value, and the IFRS 17 RA lower than the total profits. CSM under MRA and FVA methods will then be similar.

FIGURE 1: NORMAL SITUATION



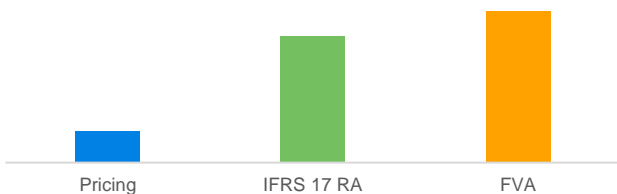
**Excessive pricing level:** the profit target used in pricing could be much higher than RA in IFRS 17 or profit target in FVA. This will show a large CSM under MRA, but not under FVA. This is because the entity uses different levels in their own and in the market perspective. The internal view on profitability is not reflected in IFRS 17.

FIGURE 2: EXCESSIVE PRICING LEVEL



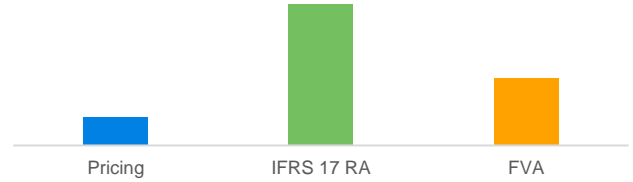
**Insufficient pricing level:** IFRS 17 is causing a change in method and/or profit target. The entity has in the past used for pricing a profit level that is relatively low compared to current standards. Existing and new business will turn out to be onerous in both transition approaches.

FIGURE 3: INSUFFICIENT PRICING LEVEL



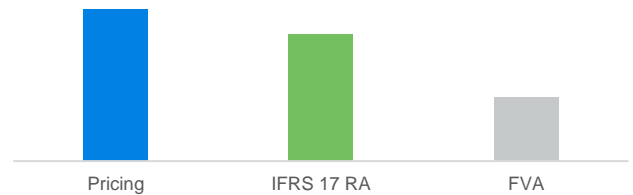
**Illogical situation:** fair value is here in line with the entity's pricing approach, but IFRS 17 RA is set much higher however. This seems to be a contradiction, because both pricing and IFRS 17 are expected to reflect the same entity's view on risk.

FIGURE 4: ILLOGICAL SITUATION



**To be avoided situation:** pricing profit target and IFRS 17 RA include here an entity specific risk aversion and/or profit target, but the company expects market participants are less demanding. The FVA will unduly deliver here a contra-intuitive onerous outcome (no CSM) for existing business, because this business would have been profitable when using MRA.

FIGURE 5: TO BE AVOIDED SITUATION



## Our considerations

Because the transition to IFRS 17 is a one-off operation that drives the profit level of existing insurance business for the remainder of its duration, insurers should carefully consider the presence of any of the above differences before deciding on either MRA or FVA. The results from first transition exercises may also be a trigger to put current pricing in line with IFRS 17, so that for new business the pricing profit target is in line with the CSM and RA under IFRS 17.

When overlooking the different cases in the previous section, one could argue that the FVA profit target should at least exceed the IFRS 17 RA. As such, the FVA creates a CSM, but one should realize that this margin is not necessarily a pure profit margin. When some company expenses are excluded from the IFRS 17 calculations, the company would already be in need of some CSM to cover for these additional expenses.

A CSM not covering such additional expenses will occur when the entity's risk aversion, reflected in their IFRS 17 Risk Adjustment, exceeds strongly what the entity perceives to be the market's level of risk aversion.

## Contracts with low profitability

Especially for contracts that have low profitability under IFRS 17, the level of the CSM at transition seems an important point of attention.

For recent existing business, the MRA approach simply shows the profitability under IFRS 17 (as reflected by the CSM in combination with Risk Adjustment), which will be in line with the profitability of newly recognized contracts after the start of IFRS 17.

Applying the FVA approach however on existing business with low IFRS 17 profitability, would in this situation increase the CSM to the higher market level of profit requirements. This “fixes” in IFRS 17 the lower profitability from a company perspective but creates a distortion between reported existing business and new business after transition, when the pricing approach is not being updated and brought more in line with IFRS 17.

This situation is in an extreme way visible for contracts that are onerous under IFRS 17. In the FVA approach a market participant will then set again a price that includes a proper profit margin. But as always with FVA, the resulting CSM will decrease the free surplus of the company, just to lock into the onerous business future IFRS profits that are basically not there from an entity perspective.

## Other FVA approaches

As mentioned, we adopted here a FVA approach that is based on limited adjustments on the IFRS 17 approach. For many entities, we advocate that this helps to keep the complexity of the different calculations under control and to understand more easily the differences between results.

Some companies however have a tradition already to put an “appraisal value”<sup>2</sup> on their insurance business. Such an alternative approach can be completely different from what they use for IFRS, such as traditional ROE, IRR or WACC profitability measures that focus on the total return on invested capital. These approaches are often also used more comprehensively, by including expected real-world returns on invested assets to complete the picture.

<sup>2</sup> The name of this category of Fair Value Approaches is taken over from the draft educational note on “Fair Value of Insurance Contracts” of the Canadian Institute of Actuaries

In our observation, companies can perfectly use such alternative valuation as an interpretation of the IFRS 13 principles for a fair value of insurance contracts. The key item however is again whether this company view on how market participants would price their business, is also the view they adopt themselves when pricing and selling these insurance products.

It will in our opinion not make sense to use a fair value approach that in some extent does not exist already in the company. Just as with the simple approach that we adopted, the main issue is again whether the profit level in this approach has also been reflected in the pricing mechanism or not.

## Conclusion

When a full retrospective method is not possible when applying IFRS 17 for the first time on existing insurance contracts, the Standard offers two equally valid alternatives: The modified retrospective approach (MRA) and the fair value approach (FVA).

The MRA is a simplified retrospective approach that can be used as far as historic cash flows for a group of contracts is available and the IFRS 17 calculation can easily roll forward contracts from time of sale to the transition to IFRS 17 date. This is in practice often only the case for recently underwritten insurance business (e.g. since publication of IFRS 17). The result then reflects the profitability of the contracts at transition dates, under the IFRS 17 measurement rules.

The FVA however is a prospective approach and considers the profits required by a market participant at time of transition to IFRS 17. To do so, the FVA is referring to the alternative and even more principle-based measurement rules from IFRS 13.

From applying these approaches in real life cases, using Milliman Mind®, we realize that the choice for either MRA or

FVA is not only a matter of practicalities. It is also important to have a coherence between internal pricing, IFRS 17 and Fair Value approaches.

For more publications on IFRS 17 and transition, do visit [www.milliman.com/en/insurance/ifrs-17](http://www.milliman.com/en/insurance/ifrs-17).

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