Effectiveness of capital light traditional products, and how they might evolve with the arrival of IFRS 17

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The implementation of Solvency II represented a huge change in the European insurance market, and so-called capital light products have assumed a key role as they can help reduce capital consumption. Understanding, therefore, the evolution of this type of product could help us find future solutions under new accounting standards like IFRS 17.

In this brief discussion paper, we analyse how companies' business choices have changed with the introduction of Solvency II, and whether the arrival of International Financial Reporting Standard (IFRS) 17 will result in similar changes. Our focus is on life insurance companies.

INTRODUCTION

What are the main drivers of change to consider and where can the real effects be seen?

Solvency II, where applicable, has had a major impact on the risk reporting of insurance companies. Indeed, companies have become more sensitive to their own risk profiles, and they have begun to review business strategies with risk much more in mind.

The new capital requirements, and the closer links between the risks a company faces and the capital it must hold, have certainly played a role in pushing companies to develop new insurance solutions. It is interesting, however, to try to understand whether Solvency II has been instrumental in the evolution of so-called capital light products.

As will be discussed further in the next section, the evolution process was not abrupt, and it became perceptible only a few years after Solvency II came into effect. To analyse its effects, it is necessary to expand the window of observation over multiple years around the introduction of Solvency II in 2016, and thus many other external factors will come into play (e.g., changes in economic conditions, government policy across Europe). These drivers will give us the opportunity to draw conclusions about the relevance of Solvency II in the evolution of European insurance business.

Analysing how companies have responded to Solvency II can help evaluate future business choices for new international accounting standards such as IFRS 17.

Therefore, the question is whether the new accounting standard will entail financial consequences for companies and thus whether there are and will be adequate business responses in the market.

HAS THE INTRODUCTION OF SOLVENCY II CHANGED THE RISK PROFILE OF COMPANIES? Earlier background

Solvency I represented capital requirement measurements on a deterministic basis, which were the same for all players and not linked to each company's own risk profile. In fact, capital requirements were calculated as 4% of technical provisions for products with guarantees and up to 1% for products without guarantees. Those requirements led to strategies detached from any explicit risk management method, and therefore led to inconsistencies in the fair representation of the liabilities of a company.

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CHANGES ARISING FROM THE INTRODUCTION OF THE SO-CALLED "THREE-PILLAR STRUCTURE"

Solvency II fundamentally changed the reporting framework, and it forced companies to adopt principles more linked to market-consistent thinking. Insurers became more sensitive to risk management and began to focus their business strategies on hedging or reducing possible adverse effects arising from taking on risk from the policyholder. The three-pillar structure under Solvency II covers quantitative, qualitative and disclosure requirements, while Solvency I mainly focused on quantitative requirements only (see section above).

Furthermore, Solvency II introduced a risk-based approach to calculating the Solvency Capital Requirement (SCR) and the Minimum Capital Requirement (MCR) for insurers, considering each insurer's risk profile. At the same time, book value (or historical value) reporting for assets has been abandoned for this purpose, switching to a market-consistent valuation method.

Solvency II enhances the disclosure and transparency requirements for insurers, both to supervisors and to the public. Insurers must also publish a Solvency and Financial Condition Report (SFCR) that supplies information on their business performance, governance system, risk exposure, valuation methods and capital adequacy. Solvency I had less stringent reporting and disclosure obligations.

THE "CHANGEOVER" IN THE ITALIAN MARKET

The "Associazione Nazionale fra le imprese assicuratrici" (ANIA) each year drafts surveys on the balance sheet position of Italian insurance companies. In 2016, it reported the effect of the changeover from Solvency I to Solvency II (SII):

"At the end of 2015, insurance companies had a solvency margin (Solvency I) of €47.5 billion; the margin owned compared to the minimum to be owned (the so-called coverage ratio) was equal to 1.5 in the life sector [...] on the other hand, if we consider the new Solvency II regulatory regime, this ratio would turn out to be [...] higher and equal to [...] 2.6 for life companies."¹

According to the statement of ANIA, in the years since the introduction of SII, Italian companies have experienced an extraordinarily strong increase in solvency ratio.

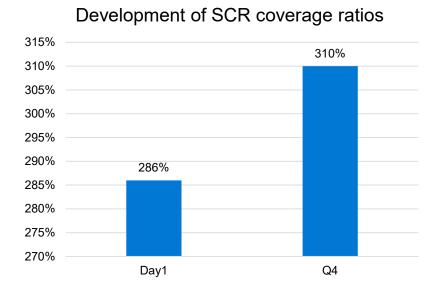
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¹ ANIA (2016). Italian Insurance in Figures.

THE GERMAN CASE

The "Bundesanstalt für Finanzdienstleistungsaufsicht" (BaFin) has reported similar findings for German insurance companies. In the graph in Figure 1 it is possible to see a slight increase in the SCR coverage between the so-called "day 1" (first reporting period for Solvency II) and Q4 (i.e., December 2016). What are Participants required to do?

FIGURE 1: EVOLUTION OF THE SCR RATIOS FROM DAY 1 TO DECEMBER 2016 IN THE GERMAN INSURANCE MARKET



GENERAL CONSIDERATIONS

The solvency ratio has increased with the introduction of the new requirements. It is still to be seen whether this increase is merely due to the regulatory change or whether the low interest rate economic scenario experienced in 2016 has greatly contributed to this increase in the SCR ratio. In any case, looking at the trend over multiple years, all major European insurance players have seen an increase in the solvency ratio due to Solvency II.

HAVE INSURANCE PRODUCTS EVOLVED WITH THE ENTRY OF SOLVENCY II? The German case

The "Gesamtverband der Versicherer" (GDV) published a survey on the change in business mix in the German life insurance market.² This is summarised in the graph in Figure 2.

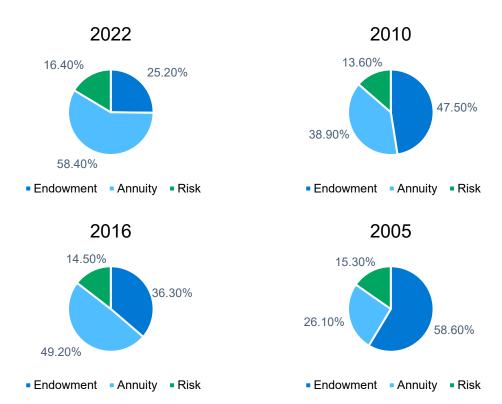


FIGURE 2: EVOLUTION OF THE BUSINESS MIX IN THE GERMAN LIFE MARKET FROM 2005 TO 2022

The German life market has been affected by a slow decline in the contribution of endowment business in favour of annuities. As can be seen from Figure 2, the change was not sudden, so it is impossible to attribute the effect solely to Solvency II. To get a complete view, one must also consider government actions and other factors that occurred during the observation period. We note in particular:

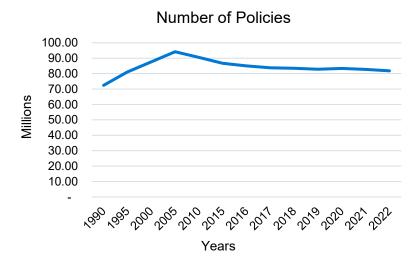
- One aspect in this regard is government-sponsored annuities, such as "Riesterrente." In 2015 there was a decrease in government pension levels and a rising awareness by consumers of the possibility of investing in annuities and the so-called pension gap in Germany (i.e., the difference between your salary during your working life and the amount you obtain from the government pension program).
- Moreover, longevity in an ageing nation like Germany made it necessary for consumers to focus more on annuities to transfer and address their own longevity risk.

Besides the change in mix, a decreasing trend in the number of new policies written can be observed. Partly this trend has been driven by the low interest rate environment, which has made it necessary to develop newer products with lower guaranteed rates.

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² Data come from "tatistiken zur deutschen Versicherungswirtschaft," published in 2022.

FIGURE 3: NUMBER OF NEW POLICIES



As discussed, the key drivers are thus not only related to the introduction of Solvency II but also to the local governmental framework and the Eurozone's low interest rate economic scenario.

IS UNIT-LINKED BUSINESS STILL A WORKABLE SOLUTION FOR LOWERING THE LEVEL OF CAPITAL?

In the earlier framework (i.e., Solvency I), unit-linked (UL) business was considered a "capital light" product, with the minimum capital requirement normally set at 1% (or lower) instead of 4% for traditional saving products. Changes under Solvency II's method of calculation have given rise to the following observations for unit-linked:

- A lot of capital is locked in under Solvency II due to the high level of profitability (because the SCR is linked to loss of future margins under stresses).
- UL SCR as a percentage of fund is quite stable over time, driven by the mass lapse shock; this shock is now becoming the most significant for European companies due to the recent high interest rate environment.
- Unit-linked business creates higher uncertainty for the company due to the direct link to the market value of the fund in which the products are invested (a significant loss in the fund value creates a corresponding negative effect on the company in terms of fees and costs).

Looking back at what has happened in the past, European companies have shifted their business away from products with guarantees (because of low interest rates, which was the situation until very recently). We can therefore say that unit-linked is a useful solution to reduce capital consumption but leads to an overreliance on market fluctuations.

THE RELEVANCE OF GOVERNMENT ACTIONS: PPE AND PER IN FRANCE

Government policies change over time and therefore a particular country may stimulate its economy differently at different times. Often such strategies may impact various market actors differently, therefore the results are often not very predictable—a case in point here is France. In 2019, a regulatory change allowed a material part of the profit-sharing reserve (PPE) to be included in the surplus fund, which is counted as a part of the capital eligible for SCR coverage. This "political decision" has greatly helped the French market and has led to an overall gain of nearly 60 basis points on the Solvency II coverage ratio on average.

FIGURE 4: IMPACT OF PPE CHANGES

COMPANY

PPE SURPLUS IMPACT ON SOLVENCY II COVERAGE RATIO (BP)

Crédit agricole Assurances	+75
Groupe CNP Assurances	+60
BNP Paribas Cardif	+67
Société générale Assurances	+70
Generali	+39
Allianz	+32

Source: Financial publications of companies from 2015 to 2020.

The "Plan d'épargne retraite" (PER) is a new retirement savings product available from 1 October 2019, which has gradually replaced other retirement savings plans. In particular, the PER:

- Can be funded by individuals, without distinction between the employment categories to which they belong.
- Offers more flexibility in terms of benefits.

From 2019 to 2022, premiums collected rose by almost 2,000%, from €492 million to €9,280 million, with transfer amounts of €14,397 million in 2022, an increase of around 46% over one year.

	PER INFLOWS

PREMIUMS (IN €M)	2019	2020	2021	2022
PER	492	3,330	6,859	9,280
Amount transfered	95	6,798	9,879	14,397
Total savings and pensions	131,800	103,700	135,200	131,700
% represented by PER	0.37%	3.21%	5.07%	7.05%

This growth in PER inflows is linkable to a market trend following the political ambition to develop supplementary pensions in France within a very favourable legal framework.

HOW HAVE PRODUCTS CHANGED IN THE ITALIAN LIFE MARKET? HAS SOLVENCY II INFLUENCED THIS CHANGE?

Since the coming into force of Solvency II, the life insurance market has developed new revaluation (policyholder profit-sharing) techniques that would allow a reduction in capital consumption. Traditionally, in Italy, revaluation rates on profit-sharing business have been driven by a formula based on book value returns on the underlying "segregated fund," with an underlying interest rate guarantee. The new techniques include:

- 1. A lowering of the minimum guarantee rate for "Saving Euro" products.
- 2. Allowing negative revaluation rates in the case of early surrender
- 3. A possible amortisation of realised capital gains over eight years from the date of realization (the so called "Fondo Utili"). (Traditionally, realised capital gains contributed to the revaluation formula immediately in the year of realisation.)
- 4. Multi-guarantee products: combining different products, in particular segregated fund products, with unit-linked.

The market direction in general over recent years has then been that of transferring risk to the policyholder. This is consistent with the impact of Solvency II on insurers, which directly links capital requirements to the risks that insurers bear, incentivising the transfer of risk from the insurer to the policyholder.

WHAT CAN WE LEARN FROM THE EXPERIENCE OF SOLVENCY II?

The analysis around Solvency II indicates the following:

- Solvency II links capital to risk, passing risk to customers, therefore reducing capital requirements. The introduction of Solvency II has therefore led to capital light products that pass risk to customers and reduce risk (and hence capital requirements) for insurers.
- Solvency II certainly played a key role in the evolution of companies' business, but it has not been the only driver. The combination of economic and government political changes has greatly influenced the choices of companies and thus the insurance market. As a result, we can say that the introduction of Solvency II has been an important evolutionary step in the insurance industry, and that together with the changes in the economic and political environment, it has changed actuarial valuations by giving them a more market-related view.

In the following section we analyse how the lessons learned from Solvency II can also be reflected in the introduction of new international reporting standards such as IFRS 17.

IMPACT OF IFRS 17 ON LIFE INSURANCE PRODUCTS Introduction

After having considered how the Solvency II framework as well as the macroeconomic environment and government actions have influenced product strategy, this section aims to investigate whether IFRS 17 may require insurance companies to reassess their pricing strategies, in order to adapt to the new accounting standards in the following years, as along with anticipating possible new market trends and at the same time meeting consumer needs. The sections below consider the following:

- Commercial product strategy. In this section, commercial product strategy is considered based on the actuarial
 and commercial framework, to understand whether the introduction of IFRS 17 has created a gap and some
 inconsistencies in the actual actuarial methodology and in the commercial strategy.
- Process. In this section, we investigate how the life insurance pricing processes might change following the introduction of IFRS 17.
- **M&A**. In this section, we consider how distributable profits and C-level decisions on mergers and acquisitions (M&A) activity may be impacted by the introduction of IFRS 17.

This section does not aim to provide a full guide of all possible new trends in life insurance products, and we believe that any changes will not occur immediately but over the next few years. A survey has been conducted in order to investigate the above topics, based on the EU market and focusing on France, Germany and Italy. Depending on the market and business target, insurance companies should conduct internal analyses in order to identify any possible actuarial methodological and commercial gaps in order to develop their strategies. Some insurance groups with first IFRS 17 disclosure in late 2022, such as Aviva plc, AXA, Generali Group, Talanx and Zurich Insurance Group, have already stated that IFRS 17 is not going to have an impact on business strategy, cash and capital generation, net holding cash flows, dividends and solvency position, mainly because total profits remain unchanged over the lifetime of the contract.^{3,4}

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³ Generali (13 December 2022). Generali updates financial community on implementation of new accounting standards and Cattolica integration. Press release. Retrieved 4 January 2024 from https://www.generali.com/media/press-releases/all/2022/Investor-Update-Press-Release.

⁴ Aviva (9 December 2022). Aviva plc releases IFRS 17 update. Retrieved 4 January 2024 from https://www.aviva.com/newsroom/newsreleases/2022/12/ifrs-17-market-update/.

COMMERCIAL PRODUCT STRATEGY

In this section we seek to understand possible IFRS 17 impacts on commercial product strategy, if any. We consider how IFRS 17 could affect the profitability structure of life insurance products to give possible insights for decision makers such as chief financial officers (CFOs), chief risk officers (CROs) and pricing managers.

We consider three areas:

- 1. Business mix. The main question here is to understand whether IFRS 17 might drive companies to prioritise some life insurance products at the expense of others, or if we would expect no change in business. Zurich Insurance Group, in an early IFRS 17 disclosure, stated that the adoption of IFRS 17 would not result in any change in its target business mix.⁵ One point to note is around classification of unit-linked (UL) products, where companies could modify the additional death benefit component depending on whether they wish to classify UL under IFRS 9 or IFRS 17, leading to differences in the timing of profit recognition in the profit and loss (P&L) statement.
- 2. Product features. The contractual service margin (CSM) is allocated to P&L based on the pattern of runoff of coverage units and, consequently, profits are no longer recognised up-front. Thus, insurance companies may wish to modify the effective duration of contracts, in order to impact the allocation of CSM to P&L. This could include, for example, higher and/or longer surrender penalties, or a maturity bonus, which would encourage policyholders to stay in their contracts for longer. Nevertheless, based on surveys done in the markets analysed, no such strategy has been implemented so far in response to IFRS 17. Another possible leverage driving duration, and hence speed of profit recognition, could be commissions and sales network remuneration patterns, including clawback mechanisms.
- 3. In addition, insurance companies could modify legal term conditions in order to adjust contract boundaries under IFRS 17, adding or amending contract terms related to repricing for example. This adjustment would modify the initial CSM amount as well as the contract duration impacting the pattern of CSM released into P&L.
- 4. Moreover, a trend of customisable products has been observed in recent years, especially for risk products, whereby the customer can create their own product, for example by adding or deleting coverages (e.g., death, dread disease, long-term care) under a single contract based on their needs. Under the IFRS 17 framework, it is necessary to separate these components because the underlying risks are different. An additional example could be a savings product where the policyholder can decide, with some degree of flexibility, to invest in one or more profit-sharing funds (segregated funds in Italy) and a unit-linked component, buying just one product.
- 5. Capital light products under IFRS 17 and the changing macroeconomic environment. The already known trend of reducing capital requirement through capital light products could continue under the IFRS 17 framework in order to have a lower risk adjustment (RA). Solvency II has had a direct impact on the introduction of capital light products due to the influence of low interest rates, which have persisted up until recently. With the changing macroeconomic environment (in particular, higher interest rates recently), it would be interesting to understand how the market will move towards new or redesigned products in order to continue to be appealing for policyholders.

In some ways capital light products could have an impact under the IFRS 17 framework as well, even though there is no capital requirement. Indeed, insurance companies would be interested in a reduction of RA due to lower underwriting risk (e.g., lapse risk or expenses risk), thus increasing the CSM. However, it should be noted that the timing of RA release into profit could differ from that associated with the CSM release. This could have a direct impact on the timing of the emergence of profit as analysed in the Milliman report "Impact of IFRS 17 on Insurance Product Pricing and Design" by Dominic Clark, Jeremy Kent and Ed Morgan, ⁶ which is described in the Process section below.

In addition, as mentioned above, new products or restyled products are emerging under current higher interest rates, such as products in Italy having a "specifica provvista di attivi" with a fixed revaluation rate for a defined period (e.g., one to three years) and a subsequent switch into a segregated fund, with the revaluation rate linked

⁵ Zurich (27 September 2022). IFRS 17 at Zurich. Retrieved 4 January 2024 from https://www.zurich.com/-/media/project/zurich/dotcom/investor-relations/docs/investors/ifrs-17-at-zurich.pdf.

⁶ Clark, D., Kent, J. & Morgan, E. (May 2020). Impact of IFRS 17 on Insurance Product Pricing and Design. Milliman Report. Retrieved 4 January 2024 from https://www.milliman.com/-/media/milliman/pdfs/articles/3112ldp_impact-of-ifrs-17_20200512.ashx.

to the return on that fund subject to a minimum guarantee. In this situation, it would be interesting to understand the possible treatment under IFRS 17, in respect of variable fee approach (VFA) eligibility, given the different natures of the two phases of the contract.

PROCESS

IFRS 17 introduces new methodologies compared with Solvency II, with higher levels of granularity and particular requirements for aggregation. This clearly requires new processes. One point is that new business profitability on an IFRS 17 basis needs to be considered in order to divide business into at least three profitability buckets for reporting purposes. In addition, it is useful to be able to consider the future contribution of new business on an IFRS 17 basis for business planning.

Based on the markets surveyed, actuarial new business methodology is not expected to change at this stage for the purpose of pricing. However, insurance companies may wish to reduce volatility in P&L by using a more sophisticated asset-liability management (ALM) model and reducing asset liability mismatch. Nevertheless, some differences in cash flow projections need to be incorporated in order to consider new business profitability on an IFRS 17 basis:

- Contract boundaries (CB): CBs need to be reviewed, including possible differences compared with Solvency II.
- Attributable expenses allocation: The expenses considered in IFRS 17 projections underlying calculations of liabilities, CSM etc. refer only to directly attributable expenses. Thus, all metrics coming from a profitability test under IFRS 17 should also include non-attributable expenses in order to be comparable with Solvency II or other frameworks.
- Discount rate curve: Discount rate and illiquidity premium (ILP) definitions are crucial, and can have a material impact on results, especially in the previous macroeconomic framework of low interest rates, in particular for products with minimum guaranteed interest rates.
- SII cost of capital is replaced by the IFRS 17 risk adjustment (RA) framework. RA on new business (NB) products could be computed on a standalone basis, isolating on new business volumes, or based on RA driver to allocate the RA percentage of existing business. In the case of projected new business value (NBV), RA needs to be computed prospectively as well, re-performing at each future reporting date all RA shocks.
- Real-world uplifts should be considered, where material, in the understanding of the runoff pattern of the CSM, as well as distributable profits, which may depend on whether the General Measurement Model (GMM) or VFA is applied. This might impact current pricing processes if not considered yet.

Even if life insurance products are not impacted, at least in the short term, by IFRS 17, the actuarial pricing office needs to understand new metrics such as CSM and its impact on P&L based on the run off of coverage units. Indeed, key performance indicators (KPIs) may need to be reviewed and new KPIs may be appropriate, in order to understand the business profitability. However, the one IFRS 17 KPI used in the market for new business margin is obtained by considering the CSM and loss component (LC) at the point of sale (PoS) for profitable and loss-making contracts, respectively, with the present value (PV) of premiums as the denominator (discounted at the same rate as used to discount cash flows), thus:

$$KPI = \frac{CSM \ PoS - LC \ PoS}{PV \ premiums}$$

In addition to this, the PV of non-attributable expense should be included to get a full view of profitability. Thus, the non-attributable costs find their way into the reporting process and into corporate strategy considerations, which will have an impact on the pricing process. It is important to highlight that not all insurance companies include a measure of NBV related to IFRS 17, and some of them ignore loss component. This KPI is used mainly in profitability pricing processes when the profitability label needs to be determined.

Furthermore, C-level management and pricing managers would probably require a bridge between Solvency II results and IFRS 17 results, which would take into account the various methodological differences between the two measures.

If it is assumed that RA is also a source of profit to be released in the P&L, then the above KPI could include the value of the runoff of RA as well. As noted above, RA may not run off in the same pattern as CSM.

The Milliman report "Impact of IFRS 17 on Insurance Product Pricing and Design" discusses the potential impact of IFRS 17 on product design by considering whether IFRS 17 may constrain (hold back) projected distributable profits more or less than Solvency II. With a number of simplifying assumptions (including that certain elements of IFRS 17 and Solvency II are the same, and that IFRS 17 CSM and Solvency II required capital run off at the same rate), it was concluded that:

- IFRS 17 might constrain profits compared with Solvency II for products with high profitability on a market-consistent basis (and thus high CSM) and/or low capital consumption (on a Solvency II basis).
- IFRS 17 may be unlikely to constrain distributable profits for products with low profitability (and thus low CSM) and/or high Solvency II capital consumption.

Lastly, insurance companies should consider the possible impact of cross-subsidy effects between contracts. Indeed, if under the Solvency II framework possible losses could be offset between loss-making and profitable products, then under the IFRS 17 framework this is not allowed, because losses need to be recognised immediately in P&L. Some actions may need to be taken especially with some campaigns to boost sales applying discounts on specific products. From a technical point of view, this effect could generate the possibility to isolate a specific product and cohort due to higher discounts applied to target a market segment, leading to a different impact in P&L between cohorts.

M&A

In this section, possible links between IFRS 17 and M&A are explored. From a buy-side position, potential acquirers might be interested in understanding the level of CSM and the bridge with Solvency II or embedded value, as well as the impact on IFRS 17 financial reporting. Nevertheless, based on the survey carried out, C-level decisions to sell or buy back book products under IFRS 17 have not been observed, so far. This is consistent with the conclusion of the paper by Ed Morgan and Jeremy Kent, "How Might IFRS 17 Change European Insurance M&A?" 8

Moreover, as noted previously, some insurance companies have stated that IFRS 17 is not going to have an impact on cash and capital generation, dividends and capital requirement positions. However, companies are likely to be interested in knowing what impact an acquisition will have on its reported earnings.

CONCLUSION

Based on the markets surveyed and the main findings coming from this research, IFRS 17 will not necessarily mean a significant change in product strategy simply because it represents a huge change in financial reporting. This conclusion is supported by the European Financial Reporting Advisory Group (EFRAG) in its report dated September 2018 (i.e., before the entry in force of IFRS 17): "IFRS 17 Insurance Contracts: Potential Impact on the Insurance Market." Nevertheless, at the same time insurance companies will wish to understand how insurance products will impact the amount and timing of IFRS 17 earnings. Thus, insurance companies should start incorporating IFRS 17 earnings into their product development processes, adjusting their current pricing frameworks accordingly. This would lead to creating a more transparent framework into the pricing process and profitability results, as well as underlying risks. However, changes in life insurance products will not always be a direct result of IFRS 17 application. Lastly, according to the International Accounting Standards Board (IASB), it is possible that some life insurance products may need to be redesigned or priced differently due to transparency towards investors and analysts. However, according to our research this does not appear to have happened yet, and it could need time to be understood by insurance companies.

⁷ Ibid.

⁸ Morgan, E. & Kent, J. (29 September 2023). How Might IFRS 17 Change European Insurance M&A? Milliman White Paper. Retrieved 4 January 2024 from https://www.milliman.com/en/insight/how-might-ifrs-17-change-european-insurance-ma.

⁹ EFRAG (3 September 2018). IFRS Insurance Contracts: Potential Impact on the Insurance Market. Retrieved 4 January 2024 from https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FMeeting%20Documents%2F1804241100512784%2F04-03%20Potential%20impact%20on%20the%20insurance%20market%20-%20EFRAG%20Board%2018-09-03.pdf.



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