Sample Answer

To: LifeCo Executive Committee

From: LifeCo Valuation Team

15 September 2023

Limitations of the LifePlus Portfolio Valuation Data

Introduction

This paper is addressed to the Executive Committee ("the Exec") and has been produced by the Valuation team. The Exec has raised concerns about the data being used to put a value on the LifePlus product. In particular, there are concerns that the data available from the legacy system is not of sufficient quality to meet the regulatory requirements, and we could be in breach of IRB Regulation 182. This note sets out the following:

- A summary of the data requirements under IRB Regulation 182
- The limitations of the data available on the LifePlus product
- Mitigations in place for the data deficiencies
- Summary and proposals

Summary of data requirements

IRB Regulation 182 sets out the regulators expectations on the relevance and quality of the data that insurers should use as a basis for their financial statements. I have set out below my summary of the key data requirements:

- Data must be accurate, and free from significant errors that could change our view of the performance of the business.
- Historical information must be consistent over time, and sufficient to assess the risks to which the insurance company is exposed, including assessing trends over time.
- Data should allow the insurer to separately assess different groups of policies with distinct risk profiles.
- The data used should be relevant for the task being performed.
- External data can be used where it is fully understood and is more relevant than the internal data available.

Concerns with the data

We are in the process of migrating data from our legacy systems to our new system. This has been completed for the LifeBasic product, and we expect to complete migration of the LifePlus product next year. We will therefore continue to be reliant on the legacy system for the coming year-end valuation of the LifePlus product.

Our analysis of the data for the LifePlus product shows that there are two key issues.

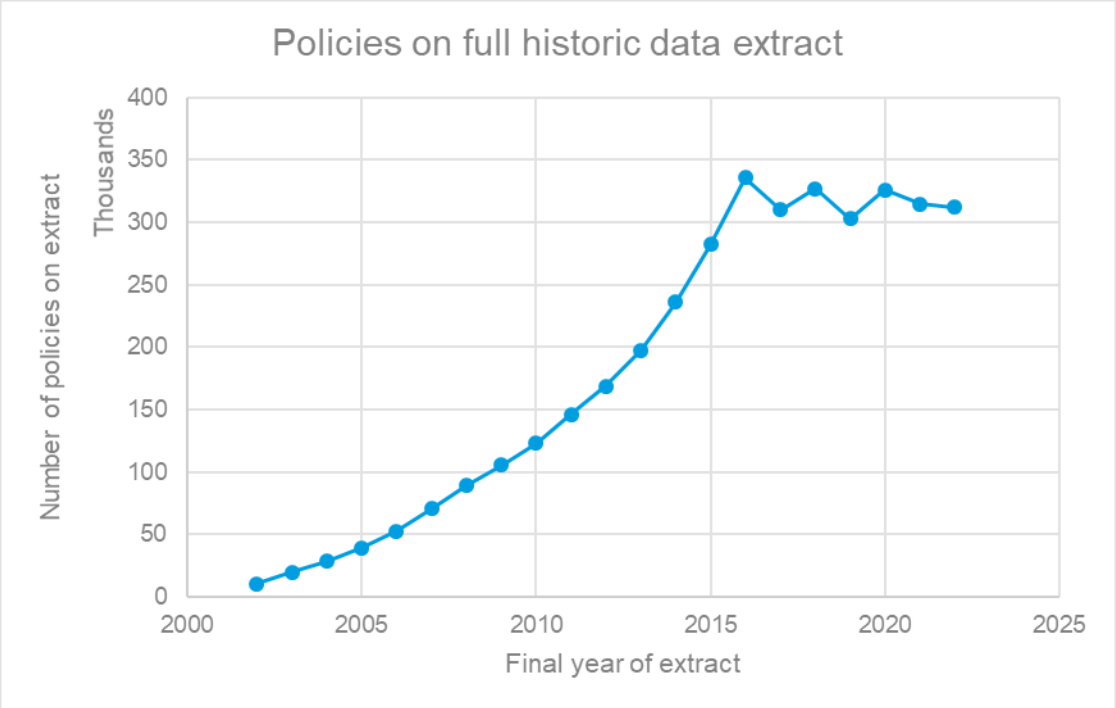
Inaccuracy of benefit details

It appears that the options that policyholders have selected are not correctly reflected in the data extract from the legacy system. In particular, some of the options that policyholders have selected are missing from the extract. On further investigation the underlying data in the system appears to

be accurate, and the issue is caused by an error in the extract. The migration to the new system will correct the problem, but for this year-end we know that the data will not show all options selected.

Inability to perform historic analysis of experience

To conduct a historic analysis of the claims and lapse rates we need a data extract that includes all current and historic policies. When performing this full data extract, the system fails to extract all policies. This is evident from the following chart, showing the number of policies on the extract as we move the end-date of the forward:



As you can see, when the size of the extract exceeds just over 300,000 policies the system fails to include all policies. Based on other records we would expect to see around 590,000 policies on the most recent extract. System constraints mean that the start date for an extract is always the date at which the first policy was written, so there is no quick fix for this issue.

Mitigations for these concerns

We have made the following adjustments to allow for the deficiencies in the data:

- We have increased the liabilities to reflect the uncertainty around the options covered. Our analysis suggests that around 15% of options are not appearing on the data extracts. To be prudent we have increased the allowance in our models for options by 20% in our valuation figures.
- Our claims experience appears to match closely to the experience seen in the industry as a whole in the earlier years of the product. We have access to industry wide data, and have used this to support our assumption setting for the year-end. To ensure we are prudent we have assumed that our future claims rates will be 5% higher than the industry average.

We have taken our auditors through the deficiencies and these mitigations, and they are satisfied with the approach that we are taking for the 2023 year-end.

Summary and proposals

There are currently deficiencies with the data that will be used for the 2023 year-end valuation for the LifePlus product. In particular the data does not reliably report the options that policyholders have selected, and we cannot get a full historic data extract to support our assumption setting. However, we are mitigating this by adding a margin for prudence to our liabilities and using industry data to set assumptions. Our auditors are satisfied that this is not a material breach of the IRB regulations, particularly because we have firm plans in place to migrate our data to a new system, which will solve these issues. We therefore propose that LifeCo continues with its current plans to migrate the LifePlus data to the new system next year.

If you would like any further details please do not hesitate to speak to Anna Pudding.

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i)

- I kept my paper very factual and did not give an opinion as to whether the company was at fault
- I did not try to apportion blame to any individual or team – it is not my place to comment on this.
- The focus of this note is on the current situation, and what is being done to mitigate the deficiencies – there is a clear plan to remedy the current deficiencies and so I focussed on this to give reassurance that the issue was in hand.
- I made it very clear that the auditors were fully aware of the issue, and that they had indicated that given the mitigations in place this was acceptable for the 2023 year-end.
- I paraphrased the regulations to show that as a valuation team we had a thorough knowledge of what was expected of us when it comes to data quality.
- I made it clear that our valuation would be prudent, to address any fears that there could be a significant worsening of the position when we have reliable data available.

ii)

- I started with an introduction that set the scene. This made the scope of the paper clear, and signposted the main points that the paper would deal with
- The first substantial section summarises the regulations around data quality – this is important context for everything that follows, and so it was important that this came first.
- Next I laid out the issues with the data, and gave some evidence for these issues. I separated the issues to make them clearer.
- When the reader understood the issues I then explained how we were mitigating these, and gave reassurance that the auditors were aware – the mitigations would not have made sense without first understanding the issues
- Finally I summarised everything and proposed next steps, with a clear contact for further questions – the audience are therefore clear on the next steps, and if they disagree they know who to speak to.

iii)

- I decided to include a brief summary of all of the key regulations in the paper.

- This gave confidence that the valuation team had a full understanding of the regulations.
- To an extent all of the regulations are pertinent to the data issues that LifeCo has, but I first highlighted the two I felt were most applicable to the situation.
- I significantly summarised the requirements, leaving out points of detail because the exec did not need these to put the data issues into context.
- I left out the reference to the data being appropriate to the statistical techniques that are being applied. Without going into much more detail about our processes it would be impossible to put this into context or covey to the Exec whether we were meeting this. It was also not relevant to the specific data issues we have.

iv)

- If the paper had been intended for the valuation team I would have included more information on the assumptions setting based on industry data. It is sufficient for the exec to know at a high level that the assumptions were set using the industry data, but the valuation team would benefit from more detailed information on this. I would have explained in detail how the assumptions were set and what data would have been reviewed
- I would not have needed to explain the timeline of the data migration to the valuation team – it is something that is discussed in detail among the team and this information would not add anything.
- I would have included more details of the regulations – it is vital that the valuation team know these in detail, and therefore I would have included them in full rather than summarising them.