

Title

Methodological Aspects of Outlier Detection in Packaged Retail Investment and Insurance Products

Speaker/Company

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Abstract

Value for Money (VfM) is a top priority in the European insurance landscape, directly impacting actuaries working with packaged retail investment and insurance products (PRIIPs). Similar to Germany's "Wohlverhaltensmerkblatt", insurers must demonstrate a fair value of their products and authorities aim to identify outlier products that do not offer a fair value. This presentation tackles the crucial challenge of outlier detection in this context, showcasing preliminary results from applying various algorithms to real, anonymized life insurance data.

We analyze key VfM indicators and their statistical properties, then critically evaluate common outlier detection methods, including Z-scores, IQR, and model-based approaches. Using real-world data, we demonstrate how the chosen method significantly influences the identification of potentially non-compliant PRIIPs. We also consider data aggregation and data groupings.

The presentation proposes a multi-faceted approach, balancing statistical rigor with contextual factors like product complexity and target market.

This research, grounded in empirical findings, provides the basis for improvements of VfM assessments and fostering a fairer PRIIPs market, highlighting the need for ongoing research and dialogue in this evolving regulatory area.

Biography

Marcus Willems earned his Master's degree in Mathematics in 2021 and began his professional journey as a scientific researcher in financial mathematics and data science at Fraunhofer ITWM in June of the same year. He plays a pivotal role in the work for the German "Produktinformationsstelle Altersvorsorge (PIA)", where he is responsible for classifying all state-funded hybrid life insurance contracts. In July 2023, he was promoted to Business Developer of the "Pensions and Life Insurance" sector within the department.
