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Financial position and performance in IFRS 17

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Abstract

The general principles for determining the financial performance of a company is that revenue is earned as goods are delivered or services provided, and that expenses in the period are made up of the costs associated with this earned revenue. In the insurance industry, premium payments are typically made upfront, and can provide coverage for several years, or be paid many years before the coverage period starts. The associated costs are often not fully known until many years later. Hence, complexity arises both in determining how a premium paid should be earned over time, and in valuing the costs associated with this earned premium. IFRS 17 attempts to align the insurance industry with these general accounting principles. We bring this new accounting standard into the realm of actuarial science, through a mathematical interpretation of the regulatory texts, and by defining the algorithm for profit or loss in accordance with the new standard. Furthermore, we suggest a computationally efficient risk-based method of valuing a portfolio of insurance contracts and an allocation of this value to subportfolios. Finally, we demonstrate the practicability of these methods and the algorithm for profit or loss in a large-scale numerical example.