

ERM, ACTUARY AND *DOUBLE MATERIALITY*: THE NEW CHALLENGE

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Enterprise Risk Management (ERM) is extensively used by both financial and non-financial organizations to mitigate negative and uncertain situations that could jeopardize business strategy and operations. By minimizing the impact or likelihood of such events, ERM helps prevent reputational, financial, or other types of damage. It is recognized as an effective tool for reducing losses from unexpected risks and enhancing business performance across various industries.



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IN RECENT YEARS, three key factors have been reshaping the risk landscape:

1. Organizations are increasingly exposed to a wide range of potential negative events that are uncertain and difficult to quantify using traditional risk management practices.
2. Potential negative events are closely linked to sustainability issues (e.g., climate change), with a broad spectrum of long-term outcomes.
3. New sustainability regulations related to Environmental, Social, and Governance (ESG) risks are being implemented. ESG risks encompass:

- Environmental: climate change, pollution, water, biodiversity, and circular economy.
- Social: interactions with employees, communities, customers, and consumers.
- Governance: corporate ethics and business conduct.

In this rapidly evolving context, actuaries are well-positioned to support organizations in transitioning to new enterprise risk management practices. This is due to four main reasons:

1. Actuarial approaches to risk management focus on statistical analysis to understand uncertainties.
2. Actuaries emphasize economic and financial quantifications of risks, including pricing and capital requirements.
3. Actuarial methods explore all possible implications of negative events, from short to long term, considering the evolution of risk impact over time.
4. Actuaries are familiar with social and environmental factors, incorporating them into actuarial analyses for insurance product pricing and the calibration of best estimate liabilities and solvency capital requirements. >

Given these reasons, the actuarial approach to Enterprise Risk Management can give benefits to organizations that adopt it. Despite their extensive knowledge of risk practices, actuaries must align with emerging ESG regulations. The recent EU sustainability regulations, known as the Corporate Sustainability Reporting Directive (CSRD), emphasize the identification, quantification, and disclosure of ESG risks. CSRD introduces the concept of *double materiality* assessment for both financial and non-financial sectors.

This principle requires companies to consider and report both the impact of sustainability factors on the company (financial materiality) and the impact of the company on the environment and society (impact materiality). Specifically:

- Financial Materiality (outside-in): how sustainability factors influence the company's value, performance, and financial position. For example, climate risks that could affect business operations, such as increased insurance claims due to extreme weather events.
- Impact Materiality (inside-out): how the company impacts the environment, society, and the economy. For example, the company's CO2 emissions and their effect on climate change, or the social impact of investment policies.

The principle of double materiality, a key element of the European Green Deal, requires the systematic integration of financially relevant sustainability risks and impacts into economic and financial decision-making processes. All organizations subject to European CSRD regulations must adopt a *double materiality* approach starting from FY2024 to identify and assess sustainability risks.

To integrate the *double materiality* approach into actuarial approach to risk management, actuaries need to:

- Strengthen technical knowledge on sustainability matters.
- Gather new data on ESG factors.
- Develop new risk models by integrating ESG factors.
- Interact with new business stakeholders (e.g., sustainability departments).
- Enhance their mindset towards new enterprise risk processes.

According to the new sustainability regulatory framework and actuarial risk principles, actuaries should improve their professional approach by:

- Understanding the context and interrelation between the company's operations, products, services and ESG factors.
- Identifying and evaluating sustainability risks and opportunities over different time horizons (short-medium-long), with robust risk assessments.
- Prioritizing sustainability factors for detailed disclosure, considering the level of risk, opportunities, and impact (Double Materiality).
- Collecting data on material sustainability factors, aligned with all CSRD requirements.
- Preparing sustainability reports and plans for future improvement.

In conclusion, actuaries can significantly contribute to the evolving risk landscape, which is increasingly intertwined with sustainability. <