

Introduction

The Joint Risk Management Section of the Society of Actuaries (SOA), the Casualty Actuarial Society (CAS) and the Canadian Institute of Actuaries (CIA), in collaboration with the International Network of Actuaries in Risk Management (IN-ARM), are pleased to release our third essay e-book, this time addressing "***Risk Metrics for Decision Making and ORSA.***"

This e-book contains 18 topical essays that express the opinions and thoughts of a number of authors on the subject. An essay is understood herein to essentially represent a short non-fiction form of writing expressing the often subjective opinion of the author. It should be understood that the thoughts and insights shared herein are not necessarily those of the Society of Actuaries, the Casualty Actuarial Society, the Canadian Institute of Actuaries, or corresponding employers of the essayists.

The insurance regulatory framework is evolving around the world. The National Association of Insurance Commissioners' (NAIC's) Own Risk Solvency Assessment (ORSA) initiative in the United States appears to be echoing the Solvency II ORSA in Europe; both intending to comply with the Insurance Core Principles of the International Association of Insurance Supervisors (IAIS). The intent of these essays is to generate discussion and debate surrounding the principles and ideas underpinning the ORSA initiative and the risk metrics used for decision making. Different points of view are presented and have been welcome.

In Owen Stein and Anthony Shapella's essay, "***Undertand ORSA Before Implementing It,***" they emphasize the responsibility of the company and going beyond regulatory compliance, which in turn is advocated by the Sam Gutterman, Brian Paton and Sunil Sen essay, "***More than Regulatory Compliance.***" On the contrary, Stephen D'Arcy's essay "***Clarifying Uncertainty***" advocates for an ORSA template prescribed by the regulator for comparability purposes. It could be argued that this notion is contrary to what is intended in the current draft proposal of the NAIC. Loïc Chenu's essay titles, "***Some Key Questions an ORSA Should Answer,***" attempts to bring both of these bipolar views under consideration in referencing the differences and intentions of the ORSA process, company-specific considerations, and the nature of the ORSA report itself as it relates to appropriate disclosure.

What one can glean from reading these essays may be perhaps that there should not be one way to do an ORSA. What seems to be a common understanding from the essays is that there needs to be:

- An internal risk management process (called either enterprise risk management (ERM) or ORSA) that covers both the observation and assessment of the entire business landscape, from risk identification to risk measurement to risk reporting, and the corresponding actions one can take that influence, prospectively, this landscape, considering risk appetite, business strategy and capital management.
- Multiple communication outputs, tailored to each audience, to share the risk transparency of the company. The multiplicity of audiences prompts the need for proper framing of the resultant communication consistent with the "eyes" of the beholder. This communication could be called, say, the ORSA report or ORSA template.

We hope these essays will provide thought-provoking discussion and commentary in the months and years to come.

Introduction continued

It is with great pleasure to congratulate the three articles voted the top three essays in our Call. It carries a cash bonus as well as an invitation to speak at the next ERM symposium in 2013.



“Understand ORSA Before Implementing It” – Anthony Shapella/Owen Stein



“Effective Resilience and Interdisciplinary Approaches to Risk” – Rick Gorvett



“Focusing on Own Risk of the ORSA Process” – Max Rudolph

TRUE OBJECTIVE OF RISK MANAGEMENT

These essays address the philosophies considering the “real” objectives and considerations of risk management. As was learned from our earlier series of essays, most risks that manifest themselves are not directly caused by any exogenous event, but rather from the decisions, biases, and behaviors of people. Although often called the “softer” side of ERM, it mostly makes up the “harder” side of contingent consequences, as learned from the financial crises.

- 05 How to Make Sure that You Take the Right Road to ERM, by Dave Ingram.
- 08 Vounó Borealis (Mountain Wind), by Jason B. Sears
- 11 Too Good to Be True, by Victoria Grossack
- 15 Minimally Destructive Scenarios and Cognitive Bias, by Mary Pat Campbell
- 18 “Effective Resilience” and Interdisciplinary Approaches to Risk, by Rick Gorvett

STAKEHOLDER MANAGEMENT

Multiple groups have keen interest and insight in the insurance industry, usually resulting in divergent points of view. What the regulatory authorities expect out of an initiative may be quite different from the expectations and/or needs of the other stakeholders (e.g., shareholders, policyholders, employees, management). The primary focus of these two essays reflects the thoughts underlying these potentially divergent expectations.

- 21 Clarifying Uncertainty, by Stephen P. D’Arcy
- 24 Is ORSA a Good Move for All the Stakeholders? by Yayuan Ren and Jianwei Xie

GENERAL OVERVIEW OF WHAT ORSA IS

What is ORSA? What is ERM? These essays attempt to address these questions directly, and in relation to the other, through various similar and sometimes different perspectives.

- 27 More than Regulatory Compliance, by Sam Gutterman, Brian Paton and Sunil Sen
- 31 Focusing on Own Risk of the ORSA Process, by Max Rudolph
- 34 Understand ORSA Before Implementing It, by Anthony Shapella and Owen Stein
- 38 Some Key Questions an ORSA Should Answer, by Loïc Chenu
- 40 Effective Risk-Based Decision Making: ORSA and Beyond, by Guillaume Briere-Giroux and Mark Scanlon

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MODELS AND MEASURES

The following essays consider the wide range of modeling and quantification aspects underlying a company's ORSA. Issues discussed range from assessing the risk of a particular model being wrong and its corresponding miscommunication minefield to considering what the "true-and-pure" measure of risk ought to be, and whether that can be even agreed on.

- 44 Arbitrage-Free Perspective on Economic Capital Calibration, by David Wang
- 47 How an Insurance Company Can Better Measure and Understand its "Own Risks," by Russell Sears
- 49 The Actuary's Use of Catastrophe Models in ORSA, by Anders Ericson and Kay Cleary
- 52 Company Management's Reaction Capacity and Management Actions: Need and Difficulty to Take These into Account in ORSA, by Stephane Loisel
- 55 Risk Metrics for Decision Making and ORSA, by Stephen J. Strommen
- 58 Economic Capital, Countercyclicality and a "Plausible" ORSA, by Evren Cubukgil and Wilson Ling

We hope that this e-book generates further thought and discussion. What are your takeaways?

We welcome further commentary, editorials and rebuttals to add to our continuing thought leadership on the topic.

Enjoy!

Best wishes,

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On behalf of the Joint Risk Management Section Council of the Society of Actuaries, Casualty Actuarial Society, Canadian Institute of Actuaries

In collaboration with the International Network of Actuaries in Risk Management.