



Highlights

To help meet the challenges of RMORSA, the IBM ERM Framework:

- Provides the valuations of risk capital that insurers will need to meet RMORSA requirements.
- Incorporates advanced modeling capabilities that covers assets and liabilities, broad instrument coverage and award-winning risk and portfolio analytics.
- Is a tried and tested ERM Framework built with leading European insurers to meet the challenges of Solvency II.
- Is a flexible and extensible framework to enable US insurers to tailor the solution to their specific requirements and to help adapt to future changes in regulation.
- Can help US insurers to transform their business and to gain competitive advantage by applying the risk analytics generated in a number of different ways.

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Risk Management and Own Risk Solvency Assessment:

*Facing the challenge with IBM's enterprise
risk framework*

In the US, the National Association of Insurance Commissioners (NAIC) voted in September 2012 to adopt the Risk Management and Own Risk Solvency Assessment (RMORSA) Model Act. This act requires most US insurers, as of 1 January 2015 to conduct an Own Risk and Solvency Assessment (ORSA) and submit an ORSA Summary Report to their state insurance commissioner. An integral component of these ORSA guidelines is the requirement that insurers adopt a comprehensive risk management framework to be embedded in their firm's business operations, with insurance companies having to increase their risk analysis and forecasting capabilities with respect to the amount of risk capital held.

IBM's enterprise risk management (ERM) framework can help insurers successfully meet the challenges of RMORSA. The solution uses award-winning risk and portfolio analytics and IBM's experience with helping leading European and global insurance companies meet the challenges of Solvency II.¹ As a result, the IBM® ERM framework provides robust risk modeling capability to address the RMORSA requirements, while providing firms with advanced functions and potential for competitive advantage that extend beyond regulatory compliance.

In 2012, IBM had two-thirds of the insurance companies that make up the European Chief Risk Officers Forum as clients for its Economic Capital and Solvency II solution.

Addressing the challenge of the ORSA Summary Report with IBM's ERM framework

IBM's ERM framework supports US insurers by providing the quantitative and qualitative valuations of risk capital that will be necessary to conduct the ORSA and to create the ORSA Summary Report. This report is an internal assessment of an insurer's material risks and must address the following three requirements as set out in the NAIC ORSA Guidance Manual.

Section 1: Description of the Insurer's Risk Management Framework

This requirement covers the ERM framework, risk identification, risk tolerances, risk management controls and risk reporting.

Although 77 percent of firms have fully defined approaches, only a third of firms have fully implemented their frameworks.²

Section 2: Insurer Assessment of Risk Exposures

This requirement covers the documentation of quantitative and qualitative assessments of risk exposure for a range of outcomes, including details on key assumptions and methodology.

Although 61 percent of companies have developed a framework for assessment techniques, only one-fifth have fully implemented assessment techniques.³

Section 3: Group Economic Capital and Prospective Solvency Assessment

This requirement covers the group capital assessment and other enterprise considerations such as capital fungibility and diversification benefits, capital forecasting capabilities and business planning.

Although slightly more than a third of companies have fully implemented these measures, nearly 40 percent are still developing an approach to address capital aggregation.⁴

IBM's comprehensive ERM framework can help US insurers meet these three requirements for the ORSA Summary Report by:

- Offering a risk management solution with audit and control elements (Section 1).
- Providing quantitative valuations of risk capital in both normal and stressed environments (Section 2)
- Incorporating enterprise-wide capital aggregation restrictions and fungibility into risk reports (Section 3).
- Creating comprehensive capital forecasting analytics (Section 3).

A flexible and extensible ERM framework

To help meet the challenges of RMORSA, IBM offers insurers a tried and tested ERM framework with advanced modeling capabilities that covers assets and liabilities, broad instrument coverage and award-winning risk and portfolio analytics. Because the ERM framework is flexible and extensible, insurers can cost-effectively incorporate individual components of the solution into their existing modeling architecture, which can then evolve as regulations change. Its flexibility also allows ad hoc requests from senior management to be addressed in a timely fashion.

IBM's key capabilities to help US insurers address the RMORSA include:

- Tools that enable US insurers to project assets and liabilities in real-world scenarios.
- Multiple approaches for modeling complex instruments in normal and stressed scenarios
- A centralized reporting environment that incorporates assets and liabilities into a single reporting environment for analyzing what-if and VaR capital calculations
- A full range of scenario generation techniques and risk and portfolio analytics with broad coverage of asset classes and investment strategies
- Faster reporting that enables users to proxy the insurance liability with either replicating portfolios or curve fitting, providing insurers with reliable estimates of the insurance liability within 7 to 10 days after a quarter close and to assess capital exposure under a wide range of outcomes

- The aggregation of balance sheet financials and reporting on capital impacts for a variety of scenarios and the tools that can help quickly revalue the balance sheet after market shocks
- Tools to assist with the internal audit and tracking requirements of RMORSA
- Capital fungibility modeling, capital forecasting and the level of granularity required in the ORSA summary report

By providing the necessary tools to help address the RMORSA Model Act, the IBM ERM framework is designed to help US insurers avoid increased regulatory scrutiny and supervision or potential ratings downgrade from rating agencies.

Regulatory compliance and beyond: Added value benefits to insurers

Although IBM's ERM framework provides the data and control to help meet RMORSA regulations, the risk analytics generated can help US insurers in a number of ways to transform their business and to gain competitive advantage. For example:

- *Risk management.* By providing capital exposures in varying scenarios, risk management systems are able to be proactive—rather than simply reactive—to changes in market environments.
- *Product pricing.* If the risk management framework is not driving business decisions, a company could develop products that are improperly priced, which could lead to capital losses. By combining assets and liabilities into a single reporting framework, the economic impact of each pricing assumption on the invested assets can be analyzed.
- *Investment benchmarks.* The framework's liability proxy methods can be utilized to help develop investment benchmarks.
- *ALM statistics.* Key metrics, such as Key Rate Durations and Greek values, from both assets and liabilities, can be evaluated and used to modify investment strategies.

About IBM Business Analytics

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Business Analytics solutions enable companies to identify and visualize trends and patterns in areas, such as customer analytics, that can have a profound effect on business performance. They can compare scenarios, anticipate potential threats and opportunities, better plan, budget and forecast resources, balance risks against expected returns and work to meet regulatory requirements. By making analytics widely available, organizations can align tactical and strategic decision-making to achieve business goals. For further information please visit ibm.com/business-analytics.

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- 1 Insurance Risk awards - 2012 winner Best Solvency II Software Package
- 2 IBM, ORSA State of Readiness Survey, 2013, page 4
- 3 IBM, ORSA State of Readiness Survey, 2013, page 6
- 4 IBM, ORSA State of Readiness Survey, 2013, page 7



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