White Paper

Success with Solvency II: Challenges and Opportunities for Asset Managers

Executive Summary

The Solvency II directive provides for an EU-wide, consistent, risk-based approach to determining capital requirements for insurance firms. When fully adopted – by January 2014 – the framework set forth through Solvency II will protect the insurance policy holder from risk of insurance company failure.

The requirements of Solvency II primarily apply to insurance firms domiciled in the European Union. However, the impact is broader - the new regulations also place an indirect burden on those asset management firms which serve insurers. Both insurance companies and their service providers must recognize how the key components of Solvency II will affect them, and must adopt a solid framework for achieving Solvency II compliance. Given the timeline for compliance, underlying infrastructure such as data management and data quality systems must be selected and implemented immediately.

This paper describes the key requirements of Solvency II, and assesses the data management impact for each. Best practices and recommendations for how firms can take a strategic approach to Solvency II are provided, to enable asset managers to turn compliance into a source of competitive advantage.

Steve Engdahl
GoldenSource Corporation

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Background

Solvency II – officially, "Directive 2009/138/EC of the European Parliament and of the Council of the European Union, on the taking-up and pursuit of the business of Insurance and Reinsurance" – extends Basel-like risk-based capital adequacy constraints into the insurance industry. The requirements are commonly grouped into three pillars:

Pillar 1: Financial/quantitative requirements, addressing methods of valuation, risk-based capital reserve calculations, and the terms of use of internal models in calculating required capital.

Pillar 2: Risk/supervisory requirements, addressing acceptable practices for risk management, internal governance, and audit, including introduction of the "Own Risk and Solvency Assessment" (ORSA).

Pillar 3: Reporting/disclosure requirements, addressing annual reporting on solvency which require substantially more information than previous required reports. These reports enable both regulators and the general public to fully understand the financial health of each firm.

Solvency II: The Data Management Perspective

Data management implications of Solvency II stem from each one of the three pillars.

Pillar 1: Financial / quantitative requirements

Pillar 1 introduces requirements for two specific calculations – minimum capital requirements (MCR) and solvency capital requirements (SCR).

Minimum capital requirements set forth the absolute minimum capital allowed for a given institution. Solvency capital requirements, which must be higher than minimum capital requirements, represent the capital necessary to absorb unforseen losses with all but 0.5% probability.

Firms may calculate these values using either a standard formula or an internal model. It is generally expected, though not absolute, that an internal model will lead to lower capital requirements than the standard formula.

Data management implications of Pillar 1:

1. **New data required for internal asset and liability models**

   Firms who elect to take advantage of internal models for deriving their minimum capital or solvency capital requirement face the task of obtaining complete position, risk, and security information to drive those models. The breadth of data required, and the scrutiny these models will face, place intense pressure on not just data completeness but also data quality. A strong data governance, scrubbing, and exception management process must be in place for internal models to succeed. Firms which address this successfully will be able to establish lower MCR and SCR levels, enabling them to increase their profitability.

2. **New valuation and accounting standards**

   Efforts are underway to align the valuation standards of Solvency II with the International Financial Reporting Standards (IFRS). Assets must be marked to market based on independent sources of pricing. Independent valuation or price verification services are required for illiquid or hard-to-value assets, and full audit trails will be necessary to support valuations used in minimum capital models.

3. **Enterprise-level aggregation requirements**

   Proper risk-based capital calculations require consolidated information on current positions, across the firm. Firms face the challenge of consolidating detail position information, with full security definitions as

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well, across tens or in many cases hundreds of different departments, systems, security types, and data formats. Each internal source of information will need to be consolidated, quality-checked, normalized, and fed into the capital calculation model.

Pillar 2: Risk / supervisory requirements

Pillar 2 sets forth the role of regulators in reviewing and assessing risks undertaken by insurance firms. With regulatory oversight, certain firms deemed more risky may be required to reserve additional capital above what their own calculations would indicate. A supervisory review process will be implemented under which firms must demonstrate that they have proper risk management practices in place, proper governance, and documented policies and procedures which are being followed.

Solvency II specifies that firms must conduct their "Own Risk and Solvency Assessment" (ORSA). Whether firms choose to use an internal model to derive their MCR and SCR levels or not, they must conduct detailed internal assessments of their solvency and the risks they are exposed to. The results of the ORSA must be used within the firm, as part of its management, decision-making, and

risk management processes. Additionally, ORSA results must be provided to supervisory bodies to facilitate their external review of each firm's risk profile.

Data management implications of Pillar 2:

1. **Internal governance**

   In order to satisfy regulatory review, firms must have the correct data governance procedures in place. Data quality monitoring processes, exception management processes, and any points of manual intervention must be clearly documented and controlled. Any inputs underlying a risk analysis or a capital requirement will be subject to external questioning and validation.

2. **Auditing**

   Related to governance, historical information must be captured to support regulatory inquiries and provide proof that necessary procedures are being followed. Especially in heterogeneous environments, firms will be challenged to pull together answers to regulatory requests for detail information. Regulatory response is simplified if a central data management framework is in place.

3. **Accountability**

   Pillar 2 places greater emphasis on capturing and storing time series data. As of any particular date, asset managers may need to drill through to the constituents of a particular calculation in order to prove that accepted procedures and models are in place and being followed, and in order to justify values supplied to the regulators.

Pillar 3: Reporting / disclosure requirements

Each firm will be required to publicly report their financial situation on a periodic basis. This includes both financial information, process information regarding risk management and governance, and assumptions used in modeling risk. While financial reporting is nothing new, Pillar 3 establishes a far greater, more detailed, level of reporting.

Data management implications of Pillar 3:

1. **Expanded data requirements**

   Higher reporting standards will place pressure on data consolidation, data sourcing, and enterprise data management. The scope of additional information required is substantial. One leading insurance firm has estimated that the universe of additional information required

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encompasses over 60 distinct categories of data, all of which must be sourced, cleansed, stored, and distributed.

2. **Timeliness of reporting**

   The timetable for private reporting to regulators is at least quarterly. Public reporting must take place once a year. While quarterly reporting may not seem onerous on the surface, consider the process which many firms went through at the height of the global financial crisis to assess their current exposure to failing financial institutions. Such information took weeks to produce at most firms. The reporting requirements under Solvency II do not just cover exposure. Process, governance, transparency of valuation methods, and risk assessment information must be disclosed. A central repository of reportable information is required in order to ensure that regulatory timeframes for reporting can be achieved.

3. **Efficiency**

   There are multiple approaches to satisfying the disclosure requirements of Solvency II. Tactically, it could be addressed at a departmental level, closest to the transactions and systems which take on the risk. However, the tactical approach generates inefficiency and potential inconsistency. Looking at Solvency II strategically, the data management processes required – loading, validating, cleansing, and enriching security and related information, can be completed more quickly and efficiently if organization only does them once, in a central golden copy. Use of a central golden copy also addresses the problem of inconsistent data provided by different areas of the firm.

4. **Auditing**

   Firms will face the need to recreate past reports in response to ad hoc client, management and regulator requests. The process to generate past reports will be extremely time consuming and potentially inaccurate without a comprehensive central repository of Solvency II-related information, stored in a time-series format and with simple means of access, query, and analysis.

Data Management Best Practices for Solvency II

The impact of Solvency II to the buyside, particularly in the area of data management, is clear. Firms which take a strategic approach to meeting Solvency II requirements – not just focusing on the minimum necessary to satisfy the regulation but finding ways to incorporate sound practices throughout their corporate practices – will be ahead in the end. They will be better able to detect and mitigate risk, reduce capital reserve requirements, satisfy regulators and in the end, satisfy their policyholders.

Strategic response to Solvency II includes several key data management best practices:

Centralized repository

To support reporting requirements, a data warehouse must be in place to capture daily information including transactions and holdings, security and static data, valuations, and risk analysis results. This facilitates not only the provision of data into MCR or SCR calculation models, but also timely reporting.

Golden copy creation

Risk analysis, valuation, and reporting is only as good as the information it is based on – which includes information about securities, classifications, prices, market data, counterparties, collateral, ratings and positions. Enterprise risk management must cut across all lines of business. Proactive firms are implementing data management frameworks, at the enterprise level, to reach into each silo, consolidate all necessary information, and manage the process of validating, cleansing, and normalizing disparate data into a golden copy. This clean data is then submitted to the risk models. The virtue of an enterprise data management framework is that full traceability is possible – an added benefit when it comes to satisfying regulatory inquiries.

Data governance

Firms must implement strong data management processes. Use of an enterprise data management

system provides a means to document, centrally, what assumptions are used in the sourcing and delivery of data. Data exception processes can be controlled and closely monitored. Strict access controls can be placed on how data is viewed, and when data must be manually modified (to address or override incorrect or incomplete data), such intervention can be entitled by user role and tracked in an audit trail. Presence of such a centrally documented and enforced data governance procedure will improve the outcomes of an Own Risk and Solvency Assessment, as well as its acceptance by the regulatory supervisors.

GoldenSource RiskHub: A Solution for Solvency II

To assist insurance and asset management firms with meeting the requirements of Solvency II, GoldenSource introduced RiskHub – a suite of data management and warehousing components designed for use within a risk department. World- class enterprise data management capabilities are now available for use on a departmental level.

Key components of GoldenSource RiskHub include:

GoldenSource Positions & Transactions

GoldenSource Positions & Transactions supports the aggregation, validation, and normalization of position information from across multiple front-, mid-, and back-office systems.

GoldenSource Securities & Products

GoldenSource Securities & Products supports sourcing, scrubbing, validation, and gold copy creation of security and reference information from data vendors and in-house sources.

GoldenSource Securities & Products provides for complete data governance, exception management, and transparency.

An added benefit of GoldenSource Securities & Products is the availability of optional Connections, GoldenSource-managed interfaces with common providers of data.

GoldenSource Warehouse

The GoldenSource Warehouse provides a repository for daily transaction, holding, security, and static data. It serves as a platform for reporting, query, and analysis of data sourced from across the firm.

Conclusions

Solvency II is a sweeping change in mindset for the European insurance industry. From rules-based to principles based regulation, the introduction of Solvency Capital Requirement and the Own Risk and Solvency Assessment, expanded reporting requirements, and strong focus on risk management and data governance processes, Solvency II is both a burden and also a strategic opportunity.

Though some of the specific details underlying Solvency II are still being determined at the time of this writing, it is clear that firms who take a strategic approach to satisfying

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Solvency II will be more effective businesses and, in the long run, more successful institutions. Sound data governance and an enterprise approach to data management are key enablers of Solvency II. Forward-looking firms are already implementing the frameworks necessary to be ready come the end of 2012.

GoldenSource, with its 25 years of expertise in data management, and with targeted, purpose-built solutions such as RiskHub, can help firms achieve their Solvency II goals in a timely fashion.

References

Text of the Solvency II directive:

http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2009:335:0001:0155:EN:PDF

Proposed amendments to the directive:

http://ec.europa.eu/internal_market/finances/docs/committees/supervision/omnibus2/com2011_en.pdf

UK Financial Services Authority (FSA) publications regarding Solvency II:

http://www.fsa.gov.uk/Pages/About/What/International/solvency/index.shtml

Complete EDM

GoldenSource makes it easy to manage critical reference and market data. We offer an integrated Enterprise Data Management (EDM) platform for the securities and investment management industry. Our innovative products are designed to create, maintain and distribute a trusted golden copy. Our unique data model covers all financial instruments, customers and counterparties, and extends to transactions and positions. The ability to connect, organize and aggregate trusted information reduces risk, drives better decisions and helps our customers achieve their goals.

GoldenSource solutions are used by forward-looking banks, brokers, investment managers and service providers to achieve tactical departmental goals and strategic enterprise objectives. A proven supplier of on premises EDM solutions to the world's largest financial institutions, GoldenSource also powers managed data services via the innovative Powered by GoldenSource program.

For details on how to contact us, please visit www.thegoldensource.com or email info@thegoldensource.com