CARE

June 6, 2011

Steven Sumner

Solvency II/ERM Preparedness
Capital Management

OUTLINE

- BACKGROUND: REGULATORY ENVIRONMENT
- SII/ERM IMPLEMENTATION: “BUSINESS MANAGEMENT INTEGRATION” IS KEY
- SII AND CAPITAL REQUIREMENTS
- ECONOMIC CAPITAL - INTERNAL MODELS - SATSFYING THE ‘USE TEST’
- EQUIVALENCY
- OTHER CONSIDERATIONS

SOLVENCY II REGULATORY ENVIRONMENT

Hey Frank! It's been awhile. How'd it go with that Solvency II implementation?

Solvency II/ERM Implementation and the Importance of Business Management Integration

Solvency II/ERM is an updated set of regulatory requirements for insurance firms that operate in the EU and goes into effect December 31, 2012. Most insurers will leverage their ERM capabilities in achieving Solvency II readiness.

Solvency II will:

- Facilitate development of a single market in insurance services in Europe
- Help assure an adequate level of consumer protection
- Make the current EU minimum requirements adequate and consistent for all member states
- Be based on economic principles for the measurement of assets and liabilities
- Require a 3-Pillar approach
- Require a forward-looking approach that will alter the way insurers are supervised
- Be risk-based
- Should be viewed by insurers as a way to strengthen risk management and day-to-day decision making - "*Business Management Integration*"

Three Pillars…

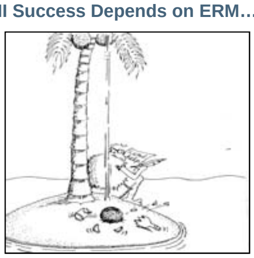
Solvency II/ERM Implementation and the Importance of Business Management Integration

Solvency II effectively actuates enterprise risk management through three pillars based on a solid business management integration foundation.

Are you ready?

Solvency II/ERM Implementation and the Importance of Business Management Integration

SII Success Depends on ERM…



Dang It!

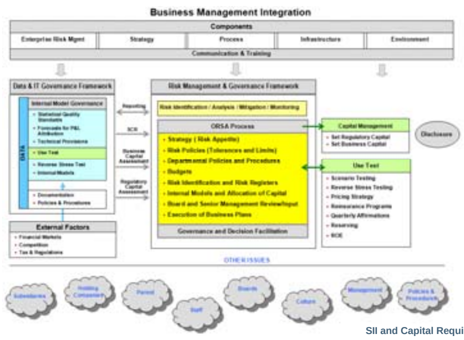
Solvency II/ERM Implementation and the Importance of Business Management Integration

Meeting the requirements and objectives of Pillars 1, 2, and 3 demands an integrated approach to business management based on an overarching framework that enables management to:

- **Achieve a “strong” ERM structure that includes:**
  - ✓ **Strategy – Risk appetite, risk tolerances, value proposition and its mission**
  - ✓ **Process – Risk identification, assessment, mitigation, control and reporting**
  - ✓ **Infrastructure – Governance, risk committees, risk limits and controls, methodologies and models, systems, data, policies and planning**
  - ✓ **Environment – Culture, risk management tone, training, risk communication, performance measurement and compensation**
- **Create a data and IT governance structure that enhances risk quantification through:**
  - ✓ **Statistical quality, controls and data standards**
  - ✓ **Technical provisions and reporting**
  - ✓ **Internal model capabilities**
  - ✓ **Documentation and a comprehensive set of policies and procedures**

Business Management Integration Model…

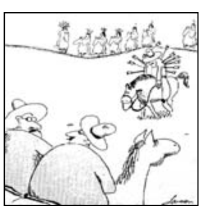
Solvency II/ERM Implementation and the Importance of Business Management Integration



SII and Capital Requirements…

Solvency II/ERM Implementation and the Importance of Business Management Integration

SII AND CAPITAL REQUIREMENTS



“Now don’t panic Clyde, let’s hear what those ornery underwriter varmints had to say to Henry.”

Capital Allocation Considerations: Questions Business Managers Seek Answers To…

- *How much capital should we hold?*
- *What returns should we expect on our capital and each line of business?*
- *How much capital should we allocate to an entity and product lines?*
- *Has management bought into the assumptions and methodology and do they understand what they all mean?*
- *How much capital should be allocated to the business units, products, perils that are contributing to the loss scenarios that used the capital?*
- *VAR @ 99.5%*

Approach to Capital Requirements…

The approach to capital requirements under Solvency II is tied to the ERM structure used for risk management…

- The regulatory approach is to have a capital model that *integrates* an assessment of the risks faced by the company
  - ✓ The model rejects the approach of having separate silos for capital modeling and risk assessment/compliance
  - ✓ Regulators are looking for an operating model that is integrated into a business and assesses business risks in determining capital requirements
- Regulators impose a default modeling regime that is penal in its capital requirements
  - ✓ Individual companies can develop and have approved their own models that are more capital efficient
  - ✓ "One size fits all" – regulatory models do not take into account special cases such as run-off (although "proportionality" principle could be used to adjust for special cases)
  - ✓ For some companies, approval of a capital-efficient model may be a competitive advantage over rivals.

Approach to capital requirements…continued…

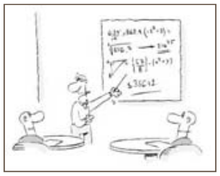
The approach to capital requirements under Solvency II is tied to the ERM structure used for risk management…

- Approach taken generally is to determine the "market value" of items on the balance sheet, on the theory that the market value reflects the risk-adjusted valuation of the balance sheet
  - ✓ For assets in most cases this means "mark to market" asset valuations
  - ✓ For liabilities this means best estimate
  - ✓ The balance sheet includes a "risk margin", but that is calculated on *the entire balance sheet* to reflect liability risks, assets risks, *and operational risks*. Hence the entire risk profile of the company needs to be embedded in the modeling, leading to an ERM approach to compliance.
  - ✓ General approach is that company needs enough capital to survive 99.5% of outcomes generated by modeling. Cf. approach in UK to run-off capital, which requires capital to survive 97.5% of outcomes *if the balance sheet is run off to expiry.* In some case Solvency II can actually (in theory) reduce required capital.

Economic Capital and Internal Models…

Solvency II Implementation and the Importance of Business Management Integration

Economic Capital and Internal Models



"Actually, our formula was a little off, so we made up the results…"

Solvency II Implementation and the Importance of Business Management Integration

Economic Capital and Internal Models: Use and Governance Policy over the Internal Model (IM)

- **Board members, senior management, management body shall be able to demonstrate an understanding of the IM**
- **IM shall fit the business model**
- **IM shall be used to support and verify the decision making process**
- **IM shall consider sufficient risks to make the IM useful for risk management and the risk management decision making process**
- **Management shall design IM in such a way that it facilitates the analysis of the business decisions as they are being made**
- **IM shall be used to improves the company's risk management**
- **Management and the board must also under stand the risks associated with using an IM**
- **Change management and governance process must be established and enforced**
- **Model validation should be incorporated into the process**

Satisfying the Use Test…

Solvency II Implementation and the Importance of Business Management Integration

Economic Capital and Internal Models: Satisfying the 'Use test'

- ***Monitoring of aggregates and board approved risk tolerances***
- ***Capital and capital decision making***
- ***Embody the entire spectrum of risk – catastrophe insurance, non-catastrophe insurance, investment, credit, operational and liquidity risks***
- ***Strategic decision making***
- ***Helps in setting mix of business targets***
- ***ROE***
- ***Limits monitoring***
- ***Pricing***
- ***Reserving***
- ***Business stress and reverse stress testing scenarios***

Output From the Internal Model…

Solvency II Implementation and the Importance of Business Management Integration

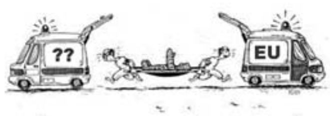
Economic Capital and Internal Models: Output from the Internal Model

- System of Governance
  - ✓ Reconciliation between IM outputs and internal and external financial reporting
- Risk Management System
  - ✓ Measurement of material risks
  - ✓ Internal risk monitoring
  - ✓ Reinsurance program design
  - ✓ Product development
- Decision Making Process
  - ✓ Investments
  - ✓ Reinsurance
  - ✓ Pricing
  - ✓ Planning
  - ✓ Capital management
  - ✓ Dividends
  - ✓ Stock repurchase

Equivalence…

Solvency II Implementation and the Importance of Business Management Integration

EQUIVALENCE



Solvency II Implementation and the Importance of Business Management Integration

Achieving equivalence with European Union regulators under Solvency II is a key strategy providing numerous benefits…

What does equivalence mean for companies that are active in EU…

EQUIVALENCE GRANTED

- Swiss and Bermuda groups active in the EU are subject to either Swiss or Bermuda group supervision
- EU companies of Swiss or Bermuda groups are subject to SII
- Swiss and Bermuda subsidiaries of EU groups might be able to calculate solvency for group solvency calculations according to either Swiss or Bermuda regulation
- Swiss and Bermuda reinsurers would see their contracts treated the same as the contracts concluded with EU reinsurers
- Agreements might provide for free access to the EU member states markets

Equivalence Not Granted…

Achieving equivalence with European Union regulators under Solvency II is a key strategy providing numerous benefits…

What does equivalence mean for companies that are active in EU…

EQUIVALENCE NOT GRANTED

- Swiss and Bermuda groups active in the EU are subject to group supervision under SII
- EU companies of Swiss and Bermuda groups are subject to SII
- Swiss and Bermuda subsidiaries of EU groups calculate solvency for group solvency purposes according to SII
- Swiss and Bermuda reinsurers have to consider the requirements of each EU member state for access to their markets
- The implications in the US are still under consideration and depends on the domicile of the parent

Meaning Of Equivalence For US Companies…

Solvency II Implementation and the Importance of Business Management Integration

Achieving equivalence with European Union regulators under Solvency II is a key strategy providing numerous benefits…

What does equivalence mean for US companies that are active in EU…

EQUIVALENCE REMAINS UNCERTAIN EVEN NOW

- *Will the Solvency Modernization Initiative carry enough weight?*
- *What about the Dodd Frank Wall Street reform Act?*
- *The implications for not achieving equivalence in the US is uncertain and still under consideration, but the impact of SII will depend on the domicile of the parent.*

Parent Domiciled In US With EU Subsidiary…

Solvency II Implementation and the Importance of Business Management Integration

Achieving equivalence with European Union regulators under Solvency II is a key strategy providing numerous benefits…

What does equivalence mean for US companies that are active in EU…

PARENT DOMICILED IN US WITH EU SUBSIDIARY

- *EU subsidiary will need to calculate its stand-alone MCR and SCR using SII methodology regardless of the status of equivalence.*
- *A decision on equivalency in the US may have an impact on the corporate structure and ultimate supervision of the subsidiary.*
- *Non-equivalence for US could increase the regulatory burdens and restructuring costs.*
- *EU supervisors have the power to require the establishment of a EU holding company to create a sub-group and enforce a solvency capital requirement calculation of the group.*

Parent Domiciled In EU With US Subsidiary…

Solvency II Implementation and the Importance of Business Management Integration

Achieving equivalence with European Union regulators under Solvency II is a key strategy providing numerous benefits…

What does equivalence mean for US companies that are active in EU…

PARENT DOMICILED IN EU WITH US SUBSIDIARY

- US sub will still need to hold risk-based capital in accordance with US regulation.
- Equivalence would mean RBC could be consolidated into SII assessment of the aggregated group capital requirement. Not possible if equivalence is not granted.
- SII assessment will be required on the US business if equivalence is not granted.

Guidelines For Equivalence…

Solvency II/ERM Implementation and the Importance of Business Management Integration

Achieving equivalence with European Union regulators under Solvency II is a key strategy providing numerous benefits…Guidelines for equivalence…

Regulatory regimes for 3rd party countries will be assessed on 3 levels with Bermuda and Switzerland being considered first. US is important but is not included in first wave.

- Reinsurance considerations
  - ✓ Need to collateralize reinsurance arrangements with assets within European Economic environment
- Group solvency
  - ✓ Ability to use local capital amounts in satisfying SII regulatory capital requirements
- Group supervision
  - ✓ Reliance on third country for group supervision
- US not included in first wave
  - ✓ No single regulator
  - ✓ No group supervisory framework
  - ✓ NAIC cannot exchange information with CEIPS due to the fact NAIC is not a supervisory Authority
- Bermuda and Switzerland equivalency to be decided in the summer of 2011

Possible Overlaps with Dodd Frank Act…

Solvency II/ERM Implementation and the Importance of Business Management Integration

Achieving equivalence with European Union regulators under Solvency II is a key strategy providing numerous benefits…Possible Overlaps with Dodd Frank Act…

- There are many similarities between the Dodd Frank Act in the US and the regulatory requirements that are expected to be implemented in the EU by December 31, 2012
  - ✓ Consumer and policy holder protection with authority and independent
  - ✓ End too big to fail
  - ✓ Transparency and disclosure but more about accountability
  - ✓ Enforces regulation on the books
  - ✓ Consumer financial protection through examination and oversight
  - ✓ US to create a Federal Insurance Office while EU to create a single market view
  - ✓ Companies must maintain a strong risk management culture with board oversight of the business
- Will Dodd Frank help to make US equivalent in the eyes of the EU?

Other Important Considerations…

Solvency II Implementation and the Importance of Business Management Integration

Other important considerations…

- Waiting is not the answer
- Solvency II initiatives can benefit other affiliate and parent companies and not just EU (re)insurers
- Bermuda is seeking equivalency and Bermuda (re)insurers will be expected to implement equivalent Solvency II measures
- Ratings agencies will consider a (re)insurers Solvency II implementation
- EU BOD of (re)insurers will be expected to be fully engaged in Solvency II initiative
- (Re)insurers in EU should be fully engaged in their Internal Model pre-application process with the FSA
- To successfully implement Solvency II, (re)insurers must demonstrate strong and effective project management and project planning
- FSA and CEIOPS have not clearly articulated or defined the expectations of a successful Solvency II implementation; there are still many questions
- Weak internal Models, poor risk management and governance practices will necessitate higher Minimum Capital Requirements and Solvency Capital Requirements by the FSA
- ECM must play a larger role in the day-to-day running of the business
- (Re)insurers must demonstrate to ratings agencies and regulators that risk management is embedded throughout the organization
- Regulation is here to stay
- ERM/SII requires a paradigm shift

Solvency II Implementation and the Importance of Business Management Integration

"And that concludes my SII implementation advice. Any questions?"