Contents

3 Executive Summary—Looking Back
4 Global Rating Agency Criteria Updates
13 United States
19 Europe
25 Asia Pacific
30 Conclusion
Executive Summary—Looking Back

2011 was a turbulent year for the insurance industry. Globally it was a record year for natural catastrophes, with economic losses of USD435 billion and insured losses of USD107 billion generated by 253 separate events. Much of the loss occurred in Asia Pacific. In the U.S., regional storm losses, new catastrophe models that more than doubled companies’ previous catastrophe exposure estimates and perceived weakening reserve positions are driving ratings discussions. In Europe, the debt crisis emerged as a potential threat to both the Eurozone economy and the common currency. All of these factors, coupled with continued soft cycle conditions and shrinking investment returns, continue to place pressure on the industry’s profitability. Nonetheless, insurer capital remains at record high levels and half-year 2012 capital levels exceed all prior periods.

Companies are successfully managing their capital levels despite macro-economic and local challenges. Some of the success can be attributed to improving industry-wide enterprise risk management (ERM). The industry is continuing to implement a heightened level of ERM, and this is one of the main topics driving current board level discussions. Further, Solvency II and Standard & Poor’s (S&P) recent economic capital model (ECM) reviews are together increasing the industry’s focus on internal capital modeling, sophisticated approaches to quantifying risks, and establishing risk appetites and tolerances.

The evolution of rating agency and regulatory criteria addresses recent and current industry events and looks forward to future industry concerns. However, as the insurance markets of the world have developed at a different pace, local regulatory and rating agency criteria develops likewise. We will look back at 2011 events as well as current industry drivers in the U.S., Europe and Asia Pacific. We will then look forward to the evolving rating agency and regulatory developments in those regions. Some of the recent criteria changes have a global impact whereas other changes are locally driven. We will first review the criteria that are globally applicable followed by a review of region specific developments and criteria.
Global Rating Agency Criteria Updates

The major rating agencies have continued to expand and refine their published rating methodology. Part of the impetus for this has been increased pressure from the SEC to improve transparency around the criteria and the ratings process. Over the past year, there have been more than 25 criteria releases/updates, nine criteria published as a Request for Comment (RFC), four annual rating surveys updated and numerous special reports issued. While updates and changes are driven by various factors, the common theme is clear: an increasingly in-depth analysis requiring more non-public data, ensuring global consistency of methodology application and increasing overall transparency.

Our paper provides more detail on the following notable items:

- S&P RFC: Insurer Rating Methodology
- S&P Pending Revised Criteria: Management and Corporate Governance
- S&P Economic Capital Model Reviews
- A.M. Best ERM
- Other A.M. Best Updates

While these are globally applicable criteria, the rating agencies often implement criteria on a different timescale across various regions. Certain companies or geographies may realize the impact sooner than others.

S&P RFC: Insurer Rating Methodology

On July 9, 2012, S&P released an RFC that corresponds to their new set of proposed criteria for rating insurance companies. S&P has advised that the updated methodology is part of a company-wide criteria revision focused on increased transparency. Based on testing, S&P expects that the majority of ratings will remain unchanged or move by no more than one notch after implementation, and that any change to the overall distribution of ratings is expected to be modest.

Exhibit 2 broadly shows the new S&P model framework.
The proposed criteria used to determine an insurer’s rating will follow these five key steps:

1. Evaluate Business Risk Profile
2. Evaluate Financial Risk Profile
3. Derive Rating Anchor from combination of 1 and 2
4. Apply Modifiers and Caps
5. Evaluate Group or Government Support, if any

Exhibit 3 depicts our view of where the rating components of S&P’s current rating framework flow into the proposed criteria.

Exhibit 3: Aon Benfield’s Mapping of S&P Rating Criteria

<table>
<thead>
<tr>
<th>Current Rating Components</th>
<th>Proposed Rating Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Risk</td>
<td>Business Risk Profile</td>
</tr>
<tr>
<td>Operating Performance</td>
<td>(Anchor)</td>
</tr>
<tr>
<td>Business Position</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Performance</td>
<td>Financial Risk Profile</td>
</tr>
<tr>
<td>Investments</td>
<td>(Anchor)</td>
</tr>
<tr>
<td>Capitalization</td>
<td></td>
</tr>
<tr>
<td>Financial Flexibility</td>
<td></td>
</tr>
<tr>
<td>Management and Corporate Strategy</td>
<td>ERM – Management (Modifier)</td>
</tr>
<tr>
<td>Enterprise Risk Management</td>
<td></td>
</tr>
<tr>
<td>Liquidity</td>
<td>Liquidity (Cap)</td>
</tr>
</tbody>
</table>

* Note: Shown for illustration purposes on a “best fit” basis; Operating Performance is considered a key component of both Business Risk and Financial Risk profiles; Other rating components may also fall into multiple places of the proposed rating matrix

Source: S&P

A key aspect of the rating matrix in the proposed criteria is geared towards enhancing transparency. The criteria provides detailed quantitative and qualitative considerations of how rating factors (and sub-factors) are measured and integrated within the rating matrix to derive a rating.

New factors in the proposed criteria not explicitly addressed in the current rating criteria include the impact of industry and country risks, analysis of prospective capital adequacy and risk position.

Business Risk Profile

The Business Risk Profile (BRP) is intended to assess the risk inherent in an insurer’s operations and the potential sustainable returns resulting from these operations. The two main drivers of Business Risk are Insurance Industry Country Risk Assessment (IICRA) and competitive position.

Financial Risk Profile

The Financial Risk Profile (FRP) is viewed as the consequence of decisions that management makes in the context of its BRP and risk tolerances. The starting point for FRP evaluation is the analysis of capital and earnings. While analyzing capital and earnings is not new for S&P, combining the analysis into one seamless component of their methodology is a change to their current approach. In addition, S&P will assess a company’s risk position and financial flexibility when evaluating FRP.

The combination of BRP and FRP form the basis of S&P’s rating anchor, which is then subject to modifiers, caps, and group or government support to derive the financial strength rating.

Modifiers and Caps

After determining the rating anchor, the proposed criteria applies additional factors (modifiers and caps) to determine the stand-alone credit profile. The modifiers are ERM and management (discussed later in more detail) and peer comparisons. Modifiers can increase, lower or be neutral to the rating anchor. However, caps are either neutral or negative to the rating anchor and include analysis on liquidity, fixed charge coverage, sovereign ratings, and transfer and convertibility assessment. The modifiers and caps are applied cumulatively.
Evolving Criteria

Evaluate Group or Government Support
The final steps consider any group support for subsidiaries or extraordinary governmental support for insurers owned by a government. S&P will assess the status of group members by defining them as either core, highly strategic, strategically important, moderately strategic or nonstrategic.

A more detailed summary on this RfC can be found at http://thoughtleadership.aonbenfield.com/documents/20120718_standard_poors_methodology.pdf

ERM within S&P’s Proposed Rating Criteria Framework
In S&P’s proposed rating criteria framework, ERM is combined with management and corporate strategy and becomes a modifier to the rating anchor, which is derived from an assessment of a company’s business risk profile and financial risk profile. ERM and management and corporate strategy scores range from very strong (1) to weak (5).1 In addition, the importance of ERM is evaluated as high or low based upon a company’s risk profile, which determines the level of influence ERM has on the rating. As a modifier, especially for companies where the level of importance is high, S&P’s view of ERM can significantly impact the final rating. For example, Exhibit 4 depicts a company with a rating anchor of ‘a+’ that can have its rating lifted by one notch if S&P views its ERM as excellent or strong, but weak ERM would cap the indicative credit rating at ‘bb’, even though the rating anchor is ‘a+’.

The final impact of ERM on the rating depends upon the interplay of the level of importance of ERM to the rating given a company’s risk profile, S&P’s view of management and corporate strategy, and the rating anchor. For many companies, the influence of ERM on the rating outcome increases under S&P’s proposed criteria.

Exhibit 4: Illustration of ERM Impact on Indicative Credit Rating

Company XYZ has a rating anchor of a+, management score of 2 and ERM deemed High importance: ERM Rating has potential to lift rating 1 notch but cap rating level at bb

ERM Rating*  Indicative Credit Rating
Excellent  aa-
Strong  aa-
Adequate w/SRC  a+
Adequate  a+
Weak  bb

Management and Corporate Strategy Score: 2

Rating Anchor: a+

ERM Importance: High

*Note: Aligned to current ERM descriptions; RfC on Insurer Rating Methodology describes ERM Assessments as “very strong”, “strong”, “adequate with strong risk controls”, “adequate” and “weak”

Source: S&P

1This differs from S&P’s description of ERM capabilities, which range from excellent to weak.
S&P Pending Revised Criteria: Management and Corporate Governance

S&P introduced a revised criteria for evaluating management and corporate governance that was originally released as an RFC on March 12, 2012 and is awaiting final adoption. S&P has stated they do not expect any significant rating changes from the proposed criteria as it is more geared towards increasing transparency and not changing their current evaluation process.

The proposed criteria outlines an analysis of management and governance into four main components with each having their own sub-factors as depicted in Exhibit 5.

Components 1, 2 and 3 can have a positive, negative or neutral impact to the rating, while Governance (Component 4) has a neutral or negative impact on management and corporate governance.

It is noteworthy to mention that this pending criteria is not impacted by the current RFC on S&P’s ratings framework previously discussed.

Exhibit 5: Overview of S&P’s Analysis of Management and Corporate Governance Framework

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic planning process</td>
<td>Risk management standards and tolerances</td>
<td>Management’s expertise and experience</td>
<td>Board independence from management</td>
</tr>
<tr>
<td>Consistency of strategy</td>
<td>Standards for operational performance</td>
<td>Management depth and breadth</td>
<td>Controlling ownership</td>
</tr>
<tr>
<td>Execution of strategy</td>
<td>Comprehensiveness of financial standards and risk tolerances</td>
<td>Management’s operational effectiveness</td>
<td>Management culture</td>
</tr>
<tr>
<td>Execution of strategy</td>
<td>Risk tolerances</td>
<td></td>
<td>Regulatory, tax or legal infractions</td>
</tr>
</tbody>
</table>

Source: S&P
Evolving Criteria

S&P Economic Capital Model Reviews

In 2011, S&P finalized its methodology to assess insurers’ economic capital models (ECMs) and commenced their evaluation process. The purpose for S&P in reviewing ECMs is to assess to what extent the results from the internal model can be used in their assessment of capital adequacy. Rated insurers with strong or excellent ERM (as defined under S&P’s criteria) have been able to choose to provide additional information to S&P, enabling S&P to review their ECM in depth. According to S&P’s ERM criteria, an ERM assessment of excellent is only possible if ECM reviews are performed, and if the outcome of the review is credible.

However, not all companies with an excellent ERM rating have been subject to an ECM review yet as S&P is still in the initial rollout phase. The ECM reviews S&P has completed to date have been focused on European insurers, including some of the largest in Europe, who are exposed to complex risks that require accurate and consistent modeling. As part of the assessment, an overall score is determined (either basic, good or superior) resulting in a credibility factor termed the M-factor. The M-factor is then used in determining S&P’s view of capital adequacy.

Exhibit 6: ECM Assessment Characteristics

<table>
<thead>
<tr>
<th>Basic</th>
<th>Good</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rudimentary approach to risk and in comparison with peers</td>
<td>Approach appears more flexible and advanced than “basic”</td>
<td>Approach appears more flexible and advanced than “good”</td>
</tr>
<tr>
<td>Risk management approaches appear undifferentiated</td>
<td>Insurer shows some evidence of developing best practices</td>
<td>Insurer consistently applies best practices where appropriate</td>
</tr>
<tr>
<td>Insurer addresses some but not all considerations of risk</td>
<td>Insurer may not consistently apply governance processes</td>
<td>Insurer’s governance processes are well-structured and consistently applied</td>
</tr>
<tr>
<td>Limited governance processes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: S&P
In June 2012, S&P published preliminary findings from their ECM reviews. The headline take away from the report was that so far, no models have been assessed as superior. The individual risk components of the ECM reviews received mixed results. Generally, financial, underwriting and reserving risk components were seen as good, whereas life and operational risks were seen to be harder to measure and generally viewed as basic. Exhibit 7 contains a summary of S&P’s review of each risk component.

Going forward, S&P believes the quality and credibility of ECMs is likely to improve. Seeking internal model approval under Solvency II has put pressure on insurers to improve model validation and governance, and has been a key driver behind model developments.

However, the lack of superior models reviewed so far by S&P suggest insurers’ need to continuously improve the standard of their models further, in order to see their M-factors rise. M-factors may be enhanced following further reviews, or as models undergo further development, refinement and validation. Conversely, M-factors could be revised downward if an insurer’s risk profile changes and if in S&P’s opinion the internal model has not evolved in line with the change.

S&P will expand the number of ECM reviews over the next year beyond Europe, including companies in North America, with a focus on those with an excellent or strong ERM rating. As S&P broadens their base of ECM reviews, we expect that their comfort level with how the S&P ECM criteria measures against the range of current practices will grow, which is necessary for the M-factor credit for internal models to increase materially.

**Exhibit 7: S&P’s Review of Key ECM Features**

<table>
<thead>
<tr>
<th>ECM Features</th>
<th>S&amp;P’s Observations</th>
</tr>
</thead>
</table>
| Complexity versus Expediency | • Balance between complexity and expediency is critical  
  • Comprehensive models not well implemented is viewed as “basic”  
  • Simplistic models prudently calibrated is viewed as “basic” |
| Financial Risk       | • Generally viewed as “good”, using well established modelling platforms  
  • Underlying distribution used for modeling investment returns differentiates “good” from “basic” |
| Underwriting Risk    | • Generally “good” with separate modeling for attritional, large loss and catastrophe risks  
  • A common limitation is a lack of allowance for insurance cycle and for trends in claims and premiums |
| Catastrophe Risk     | • Most insurers rely on vendor models and perform detailed studies to ensure risks are adequately captured  
  • The extent of these studies is what differentiates “good” from “basic” |
| Reserving Risk       | • Generally viewed as “good” with the majority using stochastic processes  
  • Deficiencies in quality of data or extensive adjustments being made to data lead to “basic” |
| Operational Risk     | • Calibration of operational risk is very challenging  
  • Most use a simple factor based approach, which leads to “basic”  
  • Complex models using internal impact studies and operational risk databases can lead to “good” |
| Diversification Benefit | • The biggest difference between S&P’s model and insurer’s ECMs  
  • Therefore much focus placed on risk dependencies and fungibility of capital |

Source: S&P
A.M. Best ERM

Over the past year, A.M. Best has continued to increase the importance and clarified the application of ERM within their ratings framework. A.M. Best released a special report on its findings from responses to an ERM section within its Supplemental Ratings Questionnaire (SRQ). In addition, A.M. Best has added a risk management section to the rating reports and presented detailed risk profile characteristics on evaluating a company’s risk management capabilities. Both are discussed in greater detail below.

A.M. Best ERM SRQ Responses

A.M. Best added an ERM section to their annual SRQ, with the responses first submitted in April 2011. Subsequently, they released a special U.S. report discussing their findings in reviewing the U.S. industry’s responses; A.M. Best has not published a similar study for other regions. Overall, A.M. Best stated they believe the industry is making progress to improve its ERM practices, but it still has a long way to go. A.M. Best assigns ratings to a very broad base of companies ranging from mono-line, regional carriers with less than USD10 million in surplus to multi-line international companies with greater than USD10 billion in surplus, therefore, measuring the status of ERM amongst such a diverse population can be challenging. Nonetheless, within the special report, A.M. Best noted some areas of concern:

- Twelve percent of companies stated they do not have a chief risk officer (CRO) or ERM Committee; 62 percent of the companies were small with less than USD50 million in surplus. A.M. Best’s view is that regardless of size, all companies should at least have an ERM committee.

- A.M. Best requested the largest potential threat to impact a company by the following risk types: market, credit, underwriting, operational, strategic, and liquidity. They expressed concern that 15 percent of companies stated they have No liquidity risk, especially in light of financial market turmoil in recent years.

- They requested companies to define their risk tolerance and found that “at least 90 percent of responses to be too broad or general”.

- For companies that stated they use economic capital models, 93 percent indicated they are used for key business decisions, but only 27 percent use the ECM to determine any portion of compensation.

Separately, Aon Benfield conducted a study of client ERM SRQ responses comparing results from April 2011 and April 2012. The rating and company size distribution of our study is in line with A.M. Best’s overall distribution, making its findings broadly applicable for benchmarking purposes. In comparing responses from each year, we have seen some increase in the percentage of companies indicating that they have a CRO or senior officer responsible for ERM, perhaps in response to A.M. Best’s critique. Also, we noted a slight uptick in the percentage of companies using ECMs as well as those estimating the impact of inflation. When evaluating responses by company surplus size (Large > USD500 million surplus), there is a significant increase in the percentage of large companies using ECMs and measuring the impact of inflation, which is expected. While we have noticed a slight improvement in the ERM SRQ responses this year, whether from companies taking greater initiative in advancing ERM or placing greater emphasis on the survey responses, we suspect A.M. Best still views the industry as having a way to go on ERM.
Evaluating Risk Management and Risk Profile

In addition to reporting on ERM SRQ results and noting areas for improvement, A.M. Best has stepped up the importance of ERM in a number of other ways. They have historically viewed ERM as an important part of the rating process as it influences balance sheet strength, operating performance and business profile. More recently, A.M. Best has indicated ERM will be graded during the rating committee review process when determining a rating. At this time, A.M. Best does not intend to make these grades public. A.M. Best has also revamped their rating reports to include a section on risk management, which will follow the rating rationale and business profile sections. Adding a section upfront in the rating report specific to Risk Management is tangible evidence of the growing importance of ERM within A.M. Best’s rating framework. Also, it will naturally increase the dialogue between analyst and company management as the analyst pens this section for the first time.

A.M. Best has consistently stated ERM is not a one-size-fits-all proposition. During their annual Review & Preview industry conference in March 2012, they outlined a framework for evaluating a company’s risk profile relative to a company’s risk management capabilities. Given the broad base of companies rated by A.M. Best, ERM capabilities and expectations are evaluated on a curve relative to a company’s risk profile. Risk management capabilities will be evaluated as being superior, strong, good or weak, while a company’s risk profile will be determined to be high, moderate, low or minimal. A company’s risk management capabilities are expected to meet or exceed its risk profile (i.e., riskiness). Depending upon this relationship, risk management may be accretive, neutral or dilutive to a company’s rating. In order to provide greater transparency around this relationship, A.M. Best provided specific benchmarks for risk profile characteristics in the areas shown in Exhibit 8.

A.M. Best also highlighted examples of high versus moderate versus low risk characteristics for each item. A.M. Best noted some of the qualitative factors may vary by line of business and/or location and these will change over time. A company’s risk profile is constantly changing; an appropriate level of risk management must advance with it and be an ongoing process.

A.M. Best is not using a scorecard approach to sum the scores of each of the components to determine an overall risk profile score. The items below are not necessarily evenly weighted as the riskiness of one characteristic may dominate A.M. Best’s overall opinion of the risk profile of the company even if the remaining items all have moderate or low risk characteristics. However, these provide a framework to help assess a company’s risk profile and thus ERM expectations.

### Exhibit 8: A.M. Best Qualitative Benchmarks for Risk Profile Characteristics

<table>
<thead>
<tr>
<th>Line of Business</th>
<th>Volatility</th>
<th>Correlation of Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity</td>
<td>Policy Limits</td>
<td>Product / Coverage Changes</td>
</tr>
<tr>
<td>Competition</td>
<td>Regulatory / Legislative Environment</td>
<td>Judicial Environment</td>
</tr>
<tr>
<td>Investments</td>
<td>Financial Flexibility</td>
<td>Economic Environment</td>
</tr>
<tr>
<td>Concentration</td>
<td>Data Quality</td>
<td>Growth</td>
</tr>
<tr>
<td>Credit Quality of Reinsurance</td>
<td>Ceded Leverage</td>
<td>Impact of Reinsurance Program</td>
</tr>
</tbody>
</table>

Source: A.M. Best
Other A.M. Best Updates

A.M. Best currently has seven draft criteria papers available for comment and has released a number of methodology papers during the past year. However, these releases have primarily been updates to existing criteria as part of A.M. Best’s continual process of reviewing and refining its methodology. None of the new or draft criteria are expected to affect ratings. Of more significance, A.M. Best made changes to its SRQ filing and allowable growth thresholds.

Changes to the SRQ are related to catastrophe exposure analysis, including requesting:

- “Management’s View” of catastrophe exposure / probable maximum loss (PML)
- Confirmation from management that the exposure analysis includes worldwide exposures
- 200-year return period loss estimates
- Aggregate loss estimates at various return periods (in addition to occurrence)
- Sensitivity testing of PMLs
- Deterministic loss scenario testing

The expanded catastrophe analysis section of the SRQ was invariably influenced by 2011 catastrophe loss activity and changes from new hurricane model releases, notably RMS version 11, which significantly increased loss estimates for many carriers. The current methodology remains intact in analyzing a company’s exposure and its impact within Best’s Capital Adequacy Ratio (BCAR) model. However, the additional information assists in gaining further insight into a company’s catastrophe risk management and enables A.M. Best to evaluate whether a revised approach is warranted in assessing catastrophe exposure.

Separately, A.M. Best increased thresholds before a growth charge would be assigned within BCAR to reflect rate increases taking place in the market. For 2012, the one year gross premium growth threshold increased from 7 percent to 9 percent and the three year rate increased from 6 percent to 7 percent. A.M. Best also evaluates growth on a policy count basis, but these thresholds remained the same for 2012, at 6 percent and 5 percent for the one year and three year basis, respectively.

Looking Forward

For the remainder of 2012 and into 2013, we expect fundamental trends to continue with respect to rating agency criteria and ERM development. Rating agency criteria will continue to evolve to respond to industry results, market trends, and demands for greater transparency and specificity. The continuing evolution will also be tied closely to increasing expectations regarding company ERM capabilities with further integration of ERM into the overall rating assessment. We expect more companies to move ahead with active use of economic capital models and be ready to have the rating agencies and regulators scrutinize the results. If unprecedented challenges lie ahead, as the industry seems to encounter quite frequently, rating agency criteria and ERM development will accelerate further and react quickly to respond to the next potential “new norm”.

Regional Analyses

Regional dynamics are continuously at play impacting the local markets. While 2011 catastrophes impacted most areas of the globe, the influence of rating agencies versus regulators varies to a significant degree region by region. In the following sections, we review the industry drivers in the U.S., Europe and Asia Pacific, focusing on those likely to have the most meaningful impact in the near term.
United States

Following another turbulent year, U.S. non-life insurers continued to navigate a negative rating environment. Companies are under pressure from the rating agencies to make an underwriting profit, though current industry conditions resulted in four consecutive years of an underwriting loss noting USD45 billion of underwriting losses in 2010/2011 alone. There were a significant number of catastrophic events across the U.S. in 2011, and these, combined with continued soft market conditions and a weakening interest rate environment, have resulted in the second consecutive year where rating downgrades have outpaced upgrades.

Rating Trends and Industry Outlooks

Below are the key industry trends across the U.S.:

• **Significant localized catastrophe loss activity:** Severe Convective Storm (SCS) activity in 2011 was more than four times the long-term national average according to our historical analysis. Additionally, our analysis has shown that 15 states have incurred their worst SCS season in history within the last 10 years, with 10 of those states experiencing their worst year in the last two years. The U.S. also witnessed Hurricane Irene making landfall in the Northeast, resulting in approximately USD4.3 billion of insured losses and testing the catastrophe risk management capabilities of certain regional insurers. The local impact of these catastrophic events impacted capitalization in a correspondingly local manner. While year-end 2011 policyholders’ surplus (PHS) for the entire industry was only down 2 percent year-over-year, 17 percent of all companies reported a decline in PHS of over 10 percent, showing how a minority of companies experienced a disproportionate share of the overall surplus loss.

• **Overall operating performance as key ratings driver:** While the triggers behind many rating changes can be interrelated to some degree (such as catastrophe losses, poor operating results and poor capitalization), general operating performance continues to be the main driver behind recent rating actions and, specifically, ratings downgrades. Our analysis shows that over the last five years poor operating results are the largest cause of A.M. Best downgrades from ‘A-’, comprising 23 percent. Additionally, over the last year we have seen poor operating results become a more important driver of rating changes. Our analysis shows that the median one-year and five-year combined ratio for companies downgraded from ‘A-’ to ‘B++’ was 17 and 10 points higher than all ‘A-’ rating units, respectively. When reviewing the various metrics of companies downgraded over the last five years, it is clear that operating performance plays a pivotal role in rating changes.

<table>
<thead>
<tr>
<th>Sector</th>
<th>“A-” to “B++” Downgrades (Year of Downgrade)</th>
<th>All “A-” Rating Units Through July 2012</th>
<th>“B++” to “A-” Own Merit Upgrades (Year of Upgrade)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Companies</td>
<td>44</td>
<td>260</td>
<td>48</td>
</tr>
<tr>
<td>Combined Ratio (%)</td>
<td>120</td>
<td>103</td>
<td>91</td>
</tr>
<tr>
<td>5 yr Combined Ratio (%)</td>
<td>110</td>
<td>100</td>
<td>88</td>
</tr>
<tr>
<td>Pretax ROR (%)</td>
<td>-12</td>
<td>6</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Aon Benfield Analytics

• **Expanding ERM expectations:** As discussed earlier in the report, with A.M. Best renewing their focus on ERM and S&P completing its first round of ECM evaluations in Europe with plans to begin in the U.S., ERM is clearly back on the forefront.
**Evolving Criteria**

- **Depressed investment returns**: Current investment yields continue to pressure insurer earnings. The 10-year treasury yield dipped below 1.5 percent this year and remains low around 1.7 percent as of August 2012. Perhaps more importantly, rates have been severely depressed for some time now, and given insurers asset turnover, the impact on non-life insurers’ investment yield is clear: the non-life U.S. industry investment yield (excluding realized gains) is down 17.4 percent when compared to five years ago. Total investment return (including realized gains) is down 38.8 percent in the same time period.

- **Continued concern over reserve adequacy**: All four major ratings agencies have reiterated their continued concern over reserve adequacy in various articles at one time over the past year. The concerns are focused on longer tailed commercial lines (particularly workers’ compensation) and that recent accident years could require reserve strengthening over time. Exhibit 10 provides a summary of public rating agency commentary this year.

When analyzing industry figures, the industry has experienced favorable reserve development for the last five quarters, and excluding the USD4.1 billion reserve strengthening taken by AIG in 2010, the industry has posted 13 straight quarters of favorable development. However, a deeper look at the figures shows the reserve cushion may be declining. Aon Benfield Analytics estimates that USD7–10 billion of favorable reserve development will occur in 2012, and that the reserve redundancy will be eliminated in a little over a year at the current run-rate.

Exhibit 11 provides a summary of current industry outlooks for each of the major rating agencies as of August 2012. The outlooks reflect the rating agencies’ perspectives on the expected direction of most rating actions within the sector in the near-term. For example, a negative outlook in commercial lines means the rating agency expects more downgrades than upgrades in this sector in the near term.

**Exhibit 11: Industry Outlooks**

<table>
<thead>
<tr>
<th>Sector</th>
<th>A.M. Best</th>
<th>Fitch</th>
<th>Moody’s</th>
<th>S&amp;P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Lines</td>
<td><strong>Negative</strong></td>
<td>Stable</td>
<td>Stable</td>
<td><strong>Negative</strong></td>
</tr>
<tr>
<td>Personal Lines</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
</tr>
<tr>
<td>Reinsurance</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
</tr>
</tbody>
</table>

*Note: As of August 3, 2012

Source: A.M. Best, Fitch, Moody’s, and S&P

The industry outlooks continue to show more stable than negative outlooks. The only change over the last 12 months has been by Moody’s, revising the commercial and reinsurance sectors to stable from negative. The move to stable for reinsurance aligned all of the rating agency outlooks for that sector, but Moody’s move to stable for commercial lines was unique. Moody’s noted stabilization of industry-wide pricing and financial results along with continued capital adequacy as their reasons for the change to stable.

**Exhibit 10: Summary of Rating Agency Commentary on Reserve Adequacy**

<table>
<thead>
<tr>
<th>Rating Agency</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.M. Best</td>
<td>“A.M. Best estimates that the P/C total net loss and LAE reserve deficiency at year-end 2011 is $40.9 billion.” “Workers Compensation shows the largest overall deficiency.”</td>
</tr>
<tr>
<td>Fitch</td>
<td>...signs of a weakening reserve position are emerging as reserve development trends in most recent accident years are unfavorable. In particular, workers’ compensation has shown reserve deficiencies recently...</td>
</tr>
<tr>
<td>Moody’s</td>
<td>We expect that reserve releases will continue to decline in 2012, particularly as companies likely have moderate deficiencies in standard commercial lines (particularly workers’ compensation and general liability) for the most recent accident years.</td>
</tr>
<tr>
<td>S&amp;P</td>
<td>“We continue to believe many of the recent reserve releases in longer tailed commercial lines, especially for recently underwritten business, are premature and could lead to further reserve strengthening over time.”</td>
</tr>
</tbody>
</table>

Source: A.M. Best, Fitch, Moody’s, and S&P
The rating activity to date in 2012 highlights a continued downgrade environment for U.S. non-life companies. As of July 1, 2012, A.M. Best has downgraded 45 companies while upgrading only 18. Looking to S&P, the results are similar with six downgrades versus one upgrade. A historical look at the relative rating trends is shown in Exhibits 12 and 13.

Another interesting trend we noted is the impact of operating performance volatility on higher rated entities. Over the past few years the percentage of insurers rated A+ by A.M. Best has been on a steady decline. Over the last five years, ‘A++’ rated entities have remained relatively flat while ‘A+’ rated entities have decreased 26 percent, from 86 entities in 2007 to 64 in 2012 as shown in Exhibit 14.

Looking forward, that trend may continue as 9 percent of ‘A+’ rated entities are on a negative outlook compared to two percent of ‘A’ entities on positive outlook.

Exhibit 12: A.M. Best Upgrades versus Downgrades

Exhibit 13: S&P Upgrades versus Downgrades

Exhibit 14: A.M. Best A++ and A+ Ratings: 2007 versus Current
NAIC’s Own Risk Solvency Assessment (ORSA)

In 2008, the NAIC initiated a thorough review of the U.S. insurance solvency regulation framework. This process is referred to as the Solvency Modernization Initiative (SMI). The NAIC’s Own Risk and Solvency Assessment (ORSA) requirement is one of the key outcomes from the SMI, and has undergone various levels of discussion and development over the last four years. The ORSA requirement in the U.S. currently aligns with ICP’s (Insurance Core Principles) Enterprise Risk Management for solvency purposes. This requires insurers to have an ERM framework for identifying and quantifying risks. It also requires insurers to perform an ORSA on a regular basis. The NAIC’s goal is for implementation of the ORSA requirement to be recognized during the 2014 International Monetary Fund’s Financial Sector Assessment Program review. However, earlier implementation is possible.

The current ORSA Summary report is comprised of three sections: 1) Description of the Insurer’s Risk Management Framework; 2) Insurer Assessment of Risk Exposures; and 3) Group Risk Capital and Prospective Solvency Assessment. These sections introduce the risk culture and governance of an insurance company and highlight key risk appetites, limits, and tolerances in meaningful areas. The risk assessment is meant to be representative of how the business is currently run and to include both quantitative and qualitative assessment of risk exposures in normal and stressed environments. The prospective solvency assessment is meant to show how company leaders plan to manage the capital needs and business development within the next five years.

Currently, the NAIC is proposing mandatory implementation only by individual companies writing more than USD500 million in direct written premiums or groups writing more than USD1 billion in direct written premiums (inclusive of life and non-life premiums).

Through August 2012, further ORSA developments have been made, most recently based on the June 29, 2012 release of the ORSA Model Act. These updates include:

- ‘Maintenance of a risk management framework’ is now required (previously N/A)
- ORSA summary report filing: required annually, no later than June 20 of each year, and should include the signature of key individuals responsible for the insurer’s risk management framework
- Confidentiality of information submitted to insurance commissioners: confidentiality provision is updated to give commissioners the authority to use information and documents submitted in order to address legal action that came about as part of the commissioner’s official duties

Given the time remaining until implementation, we expect ORSA to undergo a number of further revisions, and as such, this topic will remain at the forefront of many companies’ initiatives.
GAAP/IFRS Convergence

Accounting for Insurance Contracts is an ongoing debate both within the U.S. and globally. The FASB had been working towards convergence with IFRS in terms of issuing one standard, but as of June 2012 the FASB chair announced it is unlikely the boards will reach convergence on key differences such as the explicit risk adjustment and acquisition costs. Instead, the FASB is looking to make improvements to existing GAAP rather than issuing a separate standard or converging with IFRS. However, the boards of the FASB and IASB will continue to work jointly on current open topics. The IFRS is expected to release an updated exposure draft during the second half of 2012, and the final standard will not be effective before January 1, 2015.

Exhibit 15 provides a summary of the IFRS’ building block measurement approach for calculating the insurance liability.

Exhibit 15: IFRS Approach to Insurance Liability

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual margin</td>
<td>A residual margin that quantifies the unearned profit the insurer expects to earn as it fulfills the contract. No gain should be reported at inception of the contract.</td>
</tr>
<tr>
<td>Risk adjustment</td>
<td>An explicit estimate of the effects of uncertainty about the amount and timing of future cash flows. The IASB indicates that measurement of the liability should include an explicit risk margin whereas the FASB indicates the risk should be reflected implicitly in the measurement of the liability.</td>
</tr>
<tr>
<td>Time value of money</td>
<td>A discount rate that adjusts cash flows for the time value of money. The discount rate reflects only the characteristics of the insurance contract liability and is to be current and updated each reporting period.</td>
</tr>
<tr>
<td>Cash Flows</td>
<td>An explicit, unbiased and probability-weighted estimate of the future cash outflows (less the future cash inflows) that will arise as the insurer fulfills the insurance contract. Companies are to use the expected value of cash flows incurred in fulfilling the contract, considering all relevant information.</td>
</tr>
</tbody>
</table>

The key differences between GAAP and IFRS are:

- **The risk adjustment:** The IASB believes there should be both an explicit risk adjustment to compensate for uncertainty of amount and timing of future cash flows as well as an amount that eliminates any gain at inception (the residual margin). The FASB rejected the idea and instead supports a composite margin approach. The composite margin at initial recognition is the difference between the present value of expected value of cash inflows and the present value of expected cash outflows, though in principle, the initial recognition of an insurance contract should not result in the recognition of an accounting profit.

- **Interest rate:** The IASB indicates that the contract should accrete interest under both the residual margin and the composite approaches, and that the interest rate should be locked in at inception. The FASB does not believe that the contract should accrete interest under either approach.

- **The premium allocation approach (PAA):** This is a simplified approach that would generally apply to contracts with a one year or less contract period. Companies would not need to discount the liabilities if the claims will be settled within one year, and the liability measurement will exclude the residual margin. Also, there is limited re-measurement unless the contract is onerous. The IASB will permit this simplified approach if it is a reasonable approximation to the building block approach, and the contract is 12 months or less and no significant changes in the estimate are likely to occur. The FASB would require companies to use the PAA if similar criterion is met. Also, the FASB would require the cedent in a reinsurance contract to measure the reinsurance asset applying the same approach as used for the underlying contract.

- **Acquisition costs:** Acquisition costs that are “incremental at the contract level,” such as initial and recurring commissions, would be included as cash flows in the building block approach. All other acquisition costs are expensed as incurred. The FASB would include only those direct costs relating to successful acquisition efforts whereas the IASB would include direct costs for both successful and unsuccessful efforts.
Significant accounting uncertainty remains for insurers, both in regards to what the U.S. rules will be as well as the future differences between U.S. GAAP and IFRS regimes.

**Looking Forward**

Despite most rating agencies maintaining stable outlooks on U.S. industry sectors, we expect downgrades to continue to outpace upgrades in the near term, although by a lower ratio than experienced during the last 12 months. Even if the 2012 hurricane season remains relatively quiet, results for most companies will continue to be modest at best and fall short of upgrade standards. Lingering concern over reserves is hovering and will lead to negative rating actions should the rating agency prognostications materialize. At the same time, more focus will shift to the regulatory, accounting and legislative fronts as companies prepare for ORSA requirements, potential accounting convergence and termination or revamping of the terrorism risk insurance program reauthorization (TRIPRA) act of 2007 as it approaches expiration in December 2014.
Insurers throughout Europe continue to face considerable challenges from external influences, putting internal decision making under the microscope. The Eurozone crisis has worsened, stressing insurers’ financial strength. Downward adjustments have been made to some of the world’s leading insurers. Away from the woes of the Eurozone, Solvency II progresses towards implementation, placing internal modeling under increased scrutiny from regulators and rating agencies alike. The following pages highlight some of the key topics consuming the time of company leaders in Europe today.

### Eurozone Ratings Landscape Sustains Significant Downwards Pressure

The systemic crisis looming over the Eurozone continues to threaten the global economy and clouds rating agency credit outlooks. Similar to 2011, 2012 has seen severe market turbulence that is expected to continue over the medium-term, with economic indicators showing that signs of recovery are not positive.

Since 2010 the Eurozone has seen little growth, with current GDP growth forecasts for 2012 showing negligible increases overall. Italy and Spain, two of the larger Eurozone nations comprising 27 percent of the region’s GDP, have economies that are expected to shrink. See Exhibit 16 for projected GDP growth across the Eurozone.

### Exhibit 16: Projected GDP Growth in the Eurozone

<table>
<thead>
<tr>
<th>Country</th>
<th>2011 GDP</th>
<th>Projected 2012 GDP</th>
<th>Period Growth</th>
<th>% of Eurozone GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>301,308</td>
<td>311,424</td>
<td>3.4%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Belgium</td>
<td>368,976</td>
<td>377,672</td>
<td>2.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Cyprus</td>
<td>17,931</td>
<td>18,257</td>
<td>1.8%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Estonia</td>
<td>15,973</td>
<td>16,951</td>
<td>6.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Finland</td>
<td>191,571</td>
<td>195,981</td>
<td>2.3%</td>
<td>2.0%</td>
</tr>
<tr>
<td>France</td>
<td>1,995,335</td>
<td>2,061,845</td>
<td>3.3%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Germany</td>
<td>2,570,800</td>
<td>2,644,772</td>
<td>2.9%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Greece</td>
<td>217,812</td>
<td>206,116</td>
<td>-5.4%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Ireland</td>
<td>156,438</td>
<td>159,358</td>
<td>1.9%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Italy</td>
<td>1,580,220</td>
<td>1,571,407</td>
<td>-0.6%</td>
<td>16.4%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>41,980</td>
<td>42,525</td>
<td>1.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Malta</td>
<td>6,393</td>
<td>6,623</td>
<td>3.6%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>604,016</td>
<td>609,782</td>
<td>1.0%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Portugal</td>
<td>171,682</td>
<td>167,690</td>
<td>-2.3%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>69,059</td>
<td>71,884</td>
<td>4.1%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>35,639</td>
<td>35,643</td>
<td>0.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Spain</td>
<td>1,073,383</td>
<td>1,062,674</td>
<td>-1.0%</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

Concerns over the level of government debt continue, with two-thirds of the Eurozone exceeding the debt-to-GDP limit of 60 percent agreed under the Maastricht treaty. High levels of debt would not be fatal if the governments that are borrowing money were able to pay it back, however their economies are continuing to feel the strain of current weak conditions. Further, the peripheral zone (Portugal, Italy, Ireland, Greece, and Spain) bond market developments have shown little sign of encouragement over the past year.

Spain and Italy continue to lose credibility with 10-year bonds touching an ‘unsustainable’ level of 7 percent, while Greece’s yield has been soaring sky-high for some time. High yields fuel fears that these governments could be shut out of financial markets and may require yet more help from their Eurozone peers, leading to further widespread fiscal strain. Exhibit 17 shows a 12-month trend of government 10-year bond yields for select counties:

![Exhibit 17: Government 10-year Bond Yields–12 Month Trend](source: Financial Times)

Although the near-term risk of a Greek exit from the Euro somewhat subsided in June with successful parliamentary elections enabling Greece to take its first steps towards recovery, significant downwards pressure on Eurozone sovereign ratings remains, with Moody’s placing its ‘Aaa’ ratings on Germany, Netherlands and Luxembourg on negative outlook in July.

Fitch, Moody’s and S&P are all of the opinion that until European leaders articulate credible solutions towards greater fiscal, financial and political integration throughout the Eurozone, the sovereign ratings landscape, which has already changed dramatically over the last year, will continue to be under stress, shown in Exhibit 18.
The sovereign ratings landscape experienced a considerable shift for the worse towards the end of 2011 and early 2012 when S&P announced its decision to put 15 members of the Eurozone on CreditWatch with negative implications, later downgrading nine of these nations. Blaming “deepening political, financial and monetary problems within the Eurozone” and citing “growing systemic stresses,” S&P also maintained its negative outlook on 14 of the Eurozone nations, suggesting this may be just the first wave of rating actions.

Germany, earlier this year considered a safe haven for investors with negative yields on its short term bonds (effectively meaning investors were willing to pay to safeguard their money there) suffered ratings action in July, as Moody’s put its Aaa rating (as well as those of the Netherlands and Luxembourg) on negative watch. The move suggested that risks from within the Eurozone have steadily accumulated and are likely to drag even the strongest economies into the crisis sooner rather than later.

## Exhibit 18: Eurozone Sovereign Ratings Landscape

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>AAA</td>
<td>Stable</td>
<td>Aaa</td>
<td>Negative</td>
<td>AA+</td>
<td>Negative</td>
</tr>
<tr>
<td>Belgium</td>
<td>AA</td>
<td>Negative</td>
<td>Aa3</td>
<td>Negative</td>
<td>AAA</td>
<td>Negative</td>
</tr>
<tr>
<td>Cyprus</td>
<td>BB+</td>
<td>Negative</td>
<td>Ba3</td>
<td>Under Review</td>
<td>BB+</td>
<td>Watch Negative</td>
</tr>
<tr>
<td>Estonia</td>
<td>A+</td>
<td>Stable</td>
<td>A1</td>
<td>Stable</td>
<td>AA-</td>
<td>Negative</td>
</tr>
<tr>
<td>Finland</td>
<td>AAA</td>
<td>Stable</td>
<td>Aaa</td>
<td>Stable</td>
<td>AAA</td>
<td>Negative</td>
</tr>
<tr>
<td>France</td>
<td>AAA</td>
<td>Negative</td>
<td>Aaa</td>
<td>Negative</td>
<td>AA+</td>
<td>Negative</td>
</tr>
<tr>
<td>Germany</td>
<td>AAA</td>
<td>Stable</td>
<td>Aaa</td>
<td>Negative</td>
<td>AAA</td>
<td>Stable</td>
</tr>
<tr>
<td>Greece</td>
<td>CCC</td>
<td>N/A</td>
<td>C</td>
<td>N/A</td>
<td>CCC</td>
<td>Negative</td>
</tr>
<tr>
<td>Ireland</td>
<td>BBB+</td>
<td>Negative</td>
<td>Ba1</td>
<td>Negative</td>
<td>BBB+</td>
<td>Negative</td>
</tr>
<tr>
<td>Italy</td>
<td>A-</td>
<td>Negative</td>
<td>Baa2</td>
<td>Negative</td>
<td>BBB+</td>
<td>Negative</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>AAA</td>
<td>Stable</td>
<td>Aaa</td>
<td>Negative</td>
<td>AAA</td>
<td>Negative</td>
</tr>
<tr>
<td>Malta</td>
<td>A+</td>
<td>Stable</td>
<td>A3</td>
<td>Negative</td>
<td>A-</td>
<td>Negative</td>
</tr>
<tr>
<td>Netherlands</td>
<td>AAA</td>
<td>Stable</td>
<td>Aaa</td>
<td>Negative</td>
<td>AAA</td>
<td>Negative</td>
</tr>
<tr>
<td>Portugal</td>
<td>BB+</td>
<td>Negative</td>
<td>Ba3</td>
<td>Negative</td>
<td>BB</td>
<td>Negative</td>
</tr>
<tr>
<td>Slovakia</td>
<td>A+</td>
<td>Stable</td>
<td>A2</td>
<td>Negative</td>
<td>A</td>
<td>Stable</td>
</tr>
<tr>
<td>Slovenia</td>
<td>A</td>
<td>Negative</td>
<td>Baa2</td>
<td>Negative</td>
<td>A</td>
<td>Negative</td>
</tr>
<tr>
<td>Spain</td>
<td>BBB</td>
<td>Negative</td>
<td>Baa3</td>
<td>Under Review</td>
<td>BBB+</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Note: As of August 15, 2012

Source: Fitch, Moody’s and S&P
Impact to the Industry

Many insurers across the Eurozone and wider global economy have been impacted by the Eurozone debt crisis. Insurance companies, particularly those based in Europe, hold an extensive amount of long-term fixed income securities in Eurozone sovereign bonds as well as real estate, equities and corporate bond (bank) holdings across the region.

Insurers have had to make important decisions regarding the re-alignment of their investment portfolios in order to avoid substantial earnings hits and potential downgrades. In various ways insurers are sensitive to the Eurozone’s instability, and this sensitivity must be managed appropriately in order to protect solvency levels. Aon Benfield’s own industry analysis confirmed that direct exposure to peripheral Eurozone debt was confined to organizations with large primary insurance operations in Europe. Insurers also have indirect exposures to sovereign debt if they have holdings in European banks, who themselves are large lenders to national governments.

Increased asset risk within the Eurozone has led to rating agencies performing stress tests on insurers’ balance sheets to measure the impact to capital adequacy. Earlier in the year, A.M. Best applied five stress scenarios of escalating severity, ranging from a strong policy response contemplating an orderly Greek restructuring to a full-scale Eurozone break-up and crash of the financial markets, to many of their rated European insurers. Results showed that average BCARs for these insurers decreased by 70 percent under the stressed scenarios, and downgrades were issued as a result. Fitch too completed stress tests and arrived at similar conclusions with comparable rating actions.

As well as increased scrutiny over exposures to Eurozone debt instruments, insurers are also constrained by sovereign ratings caps. Rating agencies, place a ceiling on domestic insurer financial strength ratings, and although these ratings can be one, two or three notches higher than the sovereign, it is relatively uncommon to find a rating above the sovereign rating. This is because rating agencies view sovereign credit risk as a key consideration to the overall rating. Historically, otherwise creditworthy borrowers have defaulted directly due to sovereign defaults or indirectly due to the deterioration of its local macroeconomic environment.

Regulatory Concern

Regulators have voiced concern over the current Eurozone crisis. In 2011’s European Insurance and Occupational Pensions Authority (EIOPA) financial stability report, sovereign credit risk was ranked as the leading risk. Looking at 2012’s first half-year report, sovereign credit risk remains the number one concern. Regulators, similar to investors and insurers alike, are clearly alarmed at the state of the macroeconomic environment, with financial market risks outpacing traditional insurance risks such as natural catastrophes or property. Exhibit 19 lists EIOPA’s top insurance risks.

### Exhibit 19: EIOPA’s Top Insurance Risks

<table>
<thead>
<tr>
<th>2011</th>
<th>2012</th>
<th>↑/↓</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sovereign credit risk</td>
<td>1 Sovereign credit risk</td>
<td>-</td>
</tr>
<tr>
<td>2 Credit risk – corporate and private household</td>
<td>2 Equity risk</td>
<td>↑</td>
</tr>
<tr>
<td>3 Equity risk</td>
<td>3 Prolonged low interest rates</td>
<td>↑</td>
</tr>
<tr>
<td>4 Prolonged low interest rates</td>
<td>4 Credit risk – banks</td>
<td>new</td>
</tr>
<tr>
<td>5 Sharp rise in interest rates; fall in bond prices</td>
<td>5 Credit risk – corporate and private household</td>
<td>↓</td>
</tr>
<tr>
<td>6 Natural catastrophe</td>
<td>6 Property risk</td>
<td>↑</td>
</tr>
<tr>
<td>7 Property risk</td>
<td>7 Natural catastrophe</td>
<td>↓</td>
</tr>
<tr>
<td>8 Currency risk</td>
<td>8 Currency risk</td>
<td>-</td>
</tr>
<tr>
<td>9 Liquidity risk</td>
<td>9 Liquidity risk</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: EIOPA
Solvency II

While the Eurozone debt crisis is at the forefront of global economic news, the sweeping changes to capital and risk management requirements under Solvency II continue to progress. The new regulation will change how companies think about risk, with insurers that can demonstrate effective internal capital modeling likely to be at an advantage. The current timeline stated by EIOPA shows that the initial implementation of Solvency II is expected to be January 1, 2014. However, transitional arrangements proposed under Omnibus II will potentially reduce the risk of insurers being unable to meet capital requirements in the short-term, with maximum transition periods of 5 to 10 years proposed for key aspects of Solvency II, such as meeting the full Solvency Capital Requirement (SCR) and the treatment of hybrid instruments in solvency measures.

Exhibit 20: EIOPA’s Solvency II Timeline

<table>
<thead>
<tr>
<th>Regulation</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>’12</td>
<td>Adoption of Omnibus II Directive Commission proposal for Delegated Act</td>
<td>Late ’12</td>
<td>EIOPA to launch consultation on draft proposals for Standards and Guidelines</td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>’12</td>
<td>Pre-application process for internal models</td>
<td>’13</td>
<td>Implementation of SII Directive Supervisors ready to receive internal models</td>
</tr>
</tbody>
</table>

Source: EIOPA

Rating Agencies versus Solvency II

Rating agencies remain just as focused on Solvency II as regulators and regulated companies. However, a rating looks beyond a simple quantification of solvency and considers ongoing financial performance, viability of management and strategy, and other operating issues that support capital growth and sustainability over time. Solvency II will significantly increase the prominence of regulatory capital but, ultimately, companies that wish to maintain a strong rating and compete in the global marketplace will need to keep focus on ratings and the underlying capital considerations, beyond those of Solvency II.

Future Capital Considerations

With the macroeconomic uncertainty and a softening underwriting cycle, risk mitigation is an increasing concern, with insurers rationalizing the link between risk tolerance, capacity and reward in order to enhance business strategy. Fitch stated in a recent report entitled Solvency II Set to Reshape Asset Allocation and Capital Markets that insurers will make significant changes to asset portfolios in order to enhance their capital position. Fitch anticipates a shift from long-term to short-term debt and a migration towards higher-rated corporate debt and government bonds. Insurers may sacrifice the upside of high investment yields to limit the downside of volatile assets.
S&P and A.M. Best are the two ratings agencies with established capital models, and neither agency has suggested that their respective models will change in light of Solvency II. Both have, however, stated that considerations for a company’s internal modeling process will be taken into account when assessing capital and risk management. S&P last year began its assessment of insurers’ ECMs, terming this the ‘Level 3 review’, which is the next stage of its ERM focus. The review concentrates on the quantitative and qualitative modeling considerations and specific risks that an insurer embeds into its ECM framework. Many aspects of the Level 3 review reflect what is expected for those undergoing internal model approvals for Solvency II, including the following:

- Demonstration of internal use
- Methodology around the model
- Documentation
- Data Quality
- Assumptions and parameterization rationale and application
- Testing and validation of the model and its results
- Governance and standards surrounding the modeling process

Looking Forward

The Eurozone crisis is a clear example of why external stakeholders expect more advanced approaches to risk and capital management, with the interconnectivity between the insurance industry and macroeconomic factors more pronounced than ever before. European insurers are feeling the impact as evidenced by the number of rating downgrades. Risk management practices are now being executed in a more seamless and prudent way, which in turn, is influenced by external stakeholders such as regulators and rating agencies raising their bar of expectation.

Signs of a Eurozone recovery may not be positive in the short-to-medium term, however, within financial services, insurers seem the most shielded and best able to manage the risks and consequences of potential Eurozone defaults given their strong invested asset diversification. Sound investment risk strategies can reduce exposure to peripheral Eurozone assets and the volatility associated with them. Opportunities are available to help offset increased asset risk via reinsurance and alternative risk transfer solutions that address the underwriting risk of capital requirements.

With regards to Solvency II, our view is that it will significantly elevate the focus on regulatory capital. Ultimately, companies that want to maintain a strong rating and compete in the global marketplace will have to keep their focus on ratings, as rating agency capital requirements are currently greater than those of Solvency II.

The extremely turbulent economic environment combined with wholesale changes to the regulatory world ensures that the outlook for insurers in Europe over the short to medium term will encompass great challenges. Risk and its management continues to evolve and grow in complexity, and consequently regulators and rating agencies raise expectations with more sophisticated measurements of risk and capital adequacy.
Asia Pacific

Catastrophe losses were the main theme of the Asia-Pacific insurance market in 2011, and their market effects are still evolving. Unprecedented regional losses refreshed the industry’s understanding of catastrophes and impacted the market in multiple ways, notably: capital adequacy was threatened; prices increased; insurers pushed for better risk controls; and some reinsurers withdrew from or curtailed writings in the region while others entered the market or expanded writings. Rating agencies took negative rating actions and stepped up scrutiny of insurers’ catastrophe risk management, while various regulators began to revisit their regulations for necessary enhancements. The industry landscape across Asia-Pacific is undergoing meaningful change.

Meanwhile, the high potential for growth has not been threatened. The Asia-Pacific insurance market continues to grow in a dynamic way despite abundant challenges including securing sufficient capital to support growth and meet regulatory requirements, dealing with high catastrophe risk in many countries, adapting to improvements in catastrophe models and the data they require, operating in a highly competitive market, meeting the standards of rating agencies, and adapting to increasing regulatory scrutiny.

Catastrophe Risk

2011 witnessed significant catastrophe losses driven by the New Zealand earthquake, the Japanese Tōhoku earthquake and tsunami, the Australian floods, and the Thai floods. These events reaffirmed the industry’s concerns over unmodeled perils and revealed new issues such as liquefaction and business interruption risk. These issues present challenges to catastrophe model vendors, insurers and reinsurers alike. Model vendors have been making major investments in Asia-Pacific to increase model coverage and introduce enhancements, and models are available for many countries, though there are still considerable gaps across the region. Insurers must plan to capture additional data and integrate catastrophe model loss potential information into their business plans. Reinsurers need to continuously improve their data quality and their use of catastrophe models. More than that, companies need to improve their overall management of catastrophe risk. This may include managing aggregate loss-exposure accumulation, integrating the monitoring of exposure into the underwriting process and optimizing reinsurance arrangements.

Economic Factors

Asia-Pacific GDP growth is slowing due to the economic uncertainties in the Eurozone and the weak U.S. recovery. Export prospects and investment appetite have dampened. S&P forecasts baseline growth of 8.0 percent in China, 6.5 percent in India, 6.1 percent in Indonesia, 5.3 percent in Vietnam, and below 5 percent in other countries. These are mostly lower than the forecasts made one year ago, except for Australia, Japan, New Zealand, and Thailand, which have rebounded after natural disasters.

Even though the economy is slowing down, Asia-Pacific is still performing better than other major economies. Developing countries in this region continue to invest in infrastructure projects, and the currently low insurance penetration further drives insurance premium growth.

Rating Agency Issues

The 2011 catastrophes led A.M. Best and S&P to assign a negative outlook on a small number of insurers and a few companies were even downgraded. Facing downwards rating pressure, insurers began to look for ways to replenish their capitalization and/or strengthen their risk management. The importance of having a rating has been more widely accepted and acknowledged across the region. The desire for an initial rating has been observed in developing markets of Asia-Pacific, and there are now rated companies seeking multiple ratings. Rating agencies have also increased their efforts in market education and promotion. In the past 12 months, A.M. Best has held seminars in multiple Asia-Pacific countries while S&P has held roundtables, conference calls and targeted market visits to discuss its proposed rating criteria changes. Fitch and Moody’s also had notable activities focused on sharing their views on hot topics with the market.

As to the view of the Asia-Pacific insurance industry, despite the unprecedented catastrophe losses and diminished GDP growth, the rating agencies generally have a stable view, with S&P assigning a stable non-life outlook for countries other than India (negative, underwriting results remaining poor) and Thailand (negative, catastrophe exposure dragging on earnings). A.M. Best also assigned a stable non-life outlook for countries except for India (negative, high loss ratios and poor underwriting results).
Regulatory Developments

The catastrophe losses did not interrupt regulators’ drive to strengthen regional regulatory requirements. The trend of strengthening solvency requirements continued when Hong Kong announced in May 2011 that it was considering adopting Risk Based Capital (RBC) and when China announced in March 2012 a road-map for the second-generation solvency regime implementation. In Thailand, the RBC regime commenced in September 2011, and the enforcement was not postponed due to the floods. Japan’s solvency regime is now ruled as “Solvency II equivalent” for reinsurance by the EIOPA. Further, a few markets in Asia-Pacific have advised the European Commission that they wish to be considered for the EU’s transitional solvency equivalence scheme, including Australia, Hong Kong and Singapore.

Regulatory updates vary from market to market, but in almost all cases initiatives are underway to strengthen regulation. These include more sophisticated RBC measurements, higher levels of minimum capital, adoption of international financial reporting standards, strengthened catastrophe protection requirements, ERM, and actuarial review or auditing of reserve liabilities.

Certain regulatory actions were taken in response to the catastrophe events of 2011. First, as a result of the Tōhoku earthquake, Japan revised the earthquake insurance system, expanding total capacity with a higher insurance payment limit and higher government liability. Second, the Thai regulator granted RBC relaxations and exemptions to help local insurers overcome financial difficulty caused by the flood loss, but nonetheless, the country is forging ahead with its RBC requirements. Third, New Zealand was in the process of introducing catastrophe risk capital standards when the earthquakes started, which they enacted post-event. The calculation of the catastrophe risk capital charge will eventually be based on a projected insurance loss of a 1 in 1,000 year earthquake event.

The following provides a summary of significant regulatory developments in the region through the 12 months ending July 2012.

Australia

• The Life and General Insurance Capital Review project initiated by APRA in early 2009 has been progressing well, with the release of various prudential standards, response papers and discussion papers. APRA expects to issue the remaining final prudential standards by October 2012 with the final reporting forms and instructions. The revised capital framework will be effective from January 1, 2013, with the first reporting commencing from the first quarter in 2013.

• APRA has proposed to defer the implementation date on of the Insurance Concentration Risk Charge until January 1, 2014 for both insurers and Level 2 insurance groups after considering the potential implementation issues. However, APRA will require each insurer to calculate the quantum of the horizontal requirement from January 1, 2013 and include this in its Internal Capital Adequacy Assessment Process to help ensure that the insurer can fully meet the horizontal requirement by no later than January 1, 2014. The horizontal requirement is the greater of the net retained loss for three 1 in 10-year events or four 1 in 6-year events (both less a cat allowance in premium liability).

China

• The China Insurance Regulatory Commission (CIRC) issued a new regulation on reinsurance business. The main focus of the regulation states that:
  – Net written premiums for the year are not to exceed four times the company’s capital
  – All reinsurance transactions should be at arm’s length and not for the purpose of evading tax

• The CIRC issued a notice on March 29, 2012 on plans to develop a new Solvency Regulation System in China. The goals of the new system will be to:
  – Develop a new system comparable to international standards, with consideration of China’s specific industry development needs
  – Promote ERM and insurer’s capital management capabilities
  – Lay a solid foundation for the Chinese Insurance Industry
The draft proposal of the system is expected to take place by the end of 2014, and implementation will occur after discussion and feedback from insurers in 2015/16.

- In April 2012, the CIRC issued Methods of Retrospective Analysis of P&C Reserving. The CIRC requires the insurers to use current information to evaluate the reserving in the financial reports of previous accounting period. The analysis aimed to identify drawbacks in assumptions and processes, and then help with recalibration in the forthcoming periods.

- A new regulation was passed on May 1, 2012 allowing foreign insurance companies to undertake compulsory traffic accident liability insurance after approval by the CIRC. This was done to open up the market.

- A draft proposal on agricultural insurance regulations was issued on May 4, 2012, and is aimed at promoting the sound development of agricultural insurance.

- In June 2012, the CIRC passed a new regulation to substantially raise the bar for market entry for insurance intermediaries. It no longer approves the formation of regional insurance intermediaries, and pauses the processing of new applications for setting up insurance intermediaries.

- The CIRC has issued various new measures on investment rules for insurers, which is seen as a move to boost the insurance sector as China pushes ahead with broad financial reforms.

- The CIRC issued guidelines to encourage and support private investment in the state-owned asset dominated insurance industry, marking the country’s latest move to loosen restrictions on private capital in the financial sector.

- A new regulation, Notification of Strengthening the Solvency Management, was issued by the CIRC in July 2012, requiring insurers to strengthen their solvency management, focusing on the following four areas:
  - Setting up the solvency management mechanism
  - Preparing capitalization plan
  - Forecasting near-term solvency and preparing a remediation plan, if needed
  - Establishing accountabilities

India

- On January 3, 2012, the Insurance Regulatory and Development Authority (IRDA) issued new guidelines for Asset Liability Management Framework, to all non-life insurers and reinsurers. The minimum requirements for stress testing were also issued by IRDA to be used by insurers.

- On January 27, 2012, IRDA issued a circular to insurers to extend detailed due diligence efforts on Anti-Money Laundering and Counter-Financing of Terrorism, on countries considered as high risk from terrorist financing or money laundering.

- In May 2012, in a bid to enhance national retention capacity necessary for developing India’s domestic insurance industry, the IRDA has set minimum risk retention limits for insurers stating that insurers operational for more than 10 years are not able to cede more than 30 percent of their premiums to reinsurers. Those operating for less than 10 years will have to retain half the risk on their books. No caps were imposed previously.

- The Indian government deferred a longstanding proposal to raise the limit on foreign direct investment in insurance firms from 26 percent to 49 percent, possibly until after the 2014 elections, which could lead to more foreign insurers, already affected by other regulatory changes in India as well as issues in their home countries, to exit the country.

- In July 2012, IRDA announced that it is planning to introduce guidelines for the microinsurance segment in the country to ensure the growth of the business.
Japan

- The Financial Services Agency (FSA) introduced various updates on insurance regulations:
  - Changes in the solvency margin calculation when accounting for land
  - Introduction of FSA inspection scores. These scores are introduced to enhance in-depth discussions between insurers and inspectors, decide frequency, scope and depth of future FSA inspections and enhance transparency of financial supervising
  - Removal of capping of investments for insurers
  - Simplified procedures for aviation insurance, nuclear energy insurance, compulsory automobile liability insurance and residential earthquake insurance

- The project team for the Japanese government’s reinsurance scheme for earthquake insurance had been formed to discuss the review of the government scheme based on the experience of the Tōhoku Earthquake

- The EIOPA has ruled that Japan’s solvency regime is “Solvency II equivalent” for reinsurance only. As a result, European Economic Area (EEA) cedants using reinsurers in Japan will not face additional capital charges when the Solvency II regime is finally introduced. This will be particularly helpful for Japanese insurers with subsidiaries in the EEA which cede Japanese-owned risks back to head office in Japan.

New Zealand

- In November 2011, the Reserve Bank of New Zealand (RB) released its final Solvency Standard for Non-life Insurance Business. The solvency standard is risk-based and is intended to ensure that each company’s solvency capital is adequate for the size and mix of its business. New Zealand was in the process of introducing catastrophe risk capital standards when the earthquakes started. This is now enacted. The RB has revised the catastrophe risk capital charge for property insurers to be their net retained loss (plus the cost of one reinsurance reinstatement premium) arising from the greater of a progressive 1 in 1,000 years earthquake or a 1 in 250 years event in respect of non-earthquake extreme event.

- In computing the projected loss for major earthquake event, for financial reporting periods commencing before September 7, 2015, the projected insurance losses for the computation of the catastrophe risk capital charge is based on the greater of the maximum amount of catastrophe reinsurance held by the insurer before the date of granting a full license or an amount based on 1 in 500-years loss return period. The loss return period is then based on 1 in 750 years for financial period commencing from September 8, 2015 to September 7, 2016 and 1 in 1000 years for financial reporting periods commencing on or after September 8, 2016.

- For insurers which do not write property insurance, the catastrophe risk capital charge is two times their maximum per risk retention plus the cost of one reinsurance reinstatement premium.

Philippines

- The Department of Finance and major players in the country’s insurance industry reached a compromise that grants insurers a four-year reprieve to build up their capital levels. A new order was passed that existing life and non-life insurers are required to raise their minimum paid-up capital every other year beginning 2014, starting with PHP250 million (USD6 million) in 2012 to PHP1 billion in 2020. The order further imposes a higher PHP2 billion requirement on reinsurers by 2020, and a minimum paid-up capital of PHP500 million for companies engaged solely in micro-insurance. Capital requirements may, however, be deferred for those companies undergoing mergers and consolidation or those that meet the RBC hurdle rate of 150 percent.

- The Philippines’ Department of Budget and Management has approved the proposed reorganization of the Insurance Commission, which is intended to facilitate better management and tracking of the insurance industry.
Singapore

• On February 17, 2012 the Monetary Authority of Singapore (MAS) issued a consultation paper on Insurance Group-wide Supervision. It plans to enhance supervisory practices by establishing a more robust group-wide supervision framework, which it intends to comply with international standards issued by the International Association of Insurance Supervisors on group-wide supervision.

• On February 22, 2012 the MAS issued a consultation paper to extend the Corporate Governance Framework to all locally incorporated insurers and reinsurers. The document also proposes the introduction of a disqualification rule for the directors, executive officers and employees of insurers.

• On March 27, 2012 the following regulations under Insurance (Valuation and Capital) Regulations of 2004 were amended, effective beginning March 28, 2012. These include:
  – Revise the regulatory requirements for Trade Credit Insurance, Political Risk Insurance and Mortgage Insurance
  – Revise the RBC Framework with respect to Financial Resource Adjustments
  – Clarify the valuation of land or buildings
  – Clarify the allowance for provision of non-guaranteed benefits

• The MAS issued the revised Code of Corporate Governance on May 2, 2012. The key changes to the Code relate to the areas of director independence, board composition, director training, multiple directorships, alternate directors, remuneration practices and disclosures, risk management, as well as shareholder rights and roles. The revised Code will take effect in respect of Annual Reports relating to financial years commencing after November 1, 2012.

• On June 22, 2012 the MAS released a consultation paper on the review of the RBC framework for insurance business, which is aimed to improve the comprehensiveness of the risk coverage and risk sensitivity of the framework, as well as defining more specifically the MAS’s supervisory approach with respect to the solvency intervention levels. The review also seeks to enhance insurers’ ERM practices. The review is not expected to result in a significant overhaul to the current framework.

Looking Forward

Asia-Pacific is a large and diverse market with significant challenges and opportunities for both insurers and reinsurers. Strong economic growth and increasing insurance penetration across the region are creating many new opportunities for insurers and reinsurers.

In developed markets such as Australia, New Zealand and Japan, recent major catastrophes have focused attention on a range of catastrophe issues, from unmodelled perils to the reaction of reinsurance markets to recent losses. In developing markets, catastrophe issues are also important, with additional focus on rapidly evolving regulatory requirements and a dynamic economic environment. Regulators continue to strengthen regulatory requirements, and rating agencies’ influence is continuing to increase. It is no surprise then to see the heightened focus on quantification of capital requirements including an estimate of catastrophe exposure.
Conclusion

Insurance is a dynamic industry and today we see a number of different issues playing out both globally and regionally. Globally, the industry is responding to stresses from catastrophe losses and heightened demands from rating agencies. Locally, different regulators are demanding strengthened capital, capital modeling and ERM, and companies have to react to local economic conditions. Nonetheless, the industry has weathered soft market cycles and significant catastrophe losses in the past and is experienced in adapting to new criteria. Rating agencies and regulators continue to increase the importance and growing expectations of risk management for companies of all size and complexity. Reinsurance has been a valuable risk management tool for companies to manage catastrophe exposure, capital requirements, earnings volatility and setting risk tolerances.

Looking forward, companies will continue to navigate a complex industry within ever changing landscape. Companies will be thinking about how to balance risk management with capital management. The industry’s risk management is already strong and yet is continuously improving; however, capital management is still a challenge as companies are growing capital more quickly than demand, putting pressure on ROEs. Companies see reinsurance as an accretive form of capital to support growth opportunities or reduce volatility on non-core lines of business to help meet return expectations. Learning to cope with the new low interest rate environment and navigate other macroeconomic factors such as the Eurozone crisis are challenges that still lie ahead. A hard market does not appear to be on the near-term horizon, but opportunities exist for growth in niche segments, emerging markets and innovation of product offerings. Reinsurance can help companies grow or expand into new lines and geographies and mitigate some of the risk that accompanies these opportunities. Strong ERM will be a core part of evaluating growth opportunities.
Contact Information

For additional information on this analysis or our analytical capabilities, please contact your local Aon Benfield Broker or a member of the Aon Benfield Analytics team, including:

Global

Kelly Superczynski
Head of Global Rating Agency Advisory
+1 312 381 5351
kelly.superczynski@aonbenfield.com

U.S.

Patrick Matthews
Head of U.S. Rating Agency Advisory
+1 215 751 1591
patrick.matthews@aonbenfield.com

EMEA

Marc Beckers
Head of Aon Benfield Analytics, EMEA
+44 (0)20 7086 0394
marc.beckers@aonbenfield.com

APAC

Rade Musulin
COO, Aon Benfield Analytics, APAC
+61 2 9650 0428
rade.musulin@aonbenfield.com

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