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Executive Summary—Reinsurance Value Proposition Improves to New Generational Highs

The quality of the financial security for the reinsurance market has never been higher. Reinsurers like their insurer counterparts take less risk per unit of capital than they ever have. The price of traditional reinsurance, particularly property catastrophe reinsurance has fallen in response to disruptive alternative capital that has grown in influence to become a price maker rather than a price taker. Today it is likely that the value proposition of reinsurance—the combination of quality and price—has never been higher.

Traditional reinsurers have reached the end of a 15 year journey featuring chronological stages of alternative capital's insignificance, competition and finally disruption. As disruption reigned over the last three renewal cycles, leading traditional reinsurers made material progress to incorporate the value of alternative capital—lower cost underwriting capital—into their client value propositions.

Reinsurer capital grew to USD575 billion including USD62 billion of deployed alternative capacity—both records. The growth rates in reinsurance capital and alternative capital deployed were 6 and 25 percent, respectively. Alternative capital representing only 12 percent of traditional reinsurer capital is substantially deployed in property catastrophe risks. When USD62 billion of alternative capital is compared to capital traditional reinsurers may be willing to risk upon the occurrence of a 250 year event or series of events, its influence is far more substantial—40 to 50 percent, hence, disruptive in the property catastrophe sector of the reinsurance market. Fears of its disruptive impact to other sectors of the reinsurance market are overblown. Our view is alternative capital's next most likely disruptive move will be in property insurance and business interruption rather than casualty reinsurance.

Demand for property catastrophe reinsurance grew at a slightly higher rate in 2014 and at January 2015 than in prior periods; however, the demand growth rate was still less than the growth in catastrophe reinsurance supply. Growth in demand for multiple year programs, aggregates, underlying and overlying capacity were most notable. Continued material progress has been made in improving terms and conditions for cedents. Growth in demand for casualty reinsurance programs has also improved with highly customized structures, terms and conditions—partner selection is highly emphasized by reinsurers and cedents.

We expect these trends to continue into the April, June and July 2015 renewal cycles. Insurers have the widest selection high quality offers of accretive underwriting capital choices we can recall. Growth and consolidation plans for leading insurers have found complementary support from partners in the reinsurance market—more to come.

Note: This reinsurance market outlook report should be read in conjunction with our firm’s views on rate on line, capacity and retention changes for each cedent’s market. Our professionals are prepared to discuss variations from our market sector outlook that apply to individual programs due to established trading relationships, capacity needs, loss experience, exposure management, data quality, model fitness, expiring margins and other factors that may cause variations from our reinsurance market outlook.
Supply Growth Continues to Outpace Reinsurance Demand

Global reinsurance capital continued to increase in Q3 2014, up USD5 billion over the prior quarter and approximately USD35 billion, or more than 6 percent since year end 2013. Trends in the third quarter remained in line with what was seen in the previous quarters of 2014 with healthy retained earnings, below average catastrophe losses and unrealized investment gains offsetting continued capital redistribution. In addition, non-traditional capital continues to show growth, increasing by approximately 25 percent in the first nine months of the year.

Exhibit 1: Change in global reinsurer capital

Exhibit 1: Change in global reinsurer capital

Another new normal? Historical context on market supply pricing

In 2010/2011 there was much talk of the “new normal” level of catastrophe activity, especially for U.S. severe weather. The past two years generated record high numbers of severe weather outbreaks, and insurers were braced for continued poor performance in property and homeowners lines. Since then, however, we have seen a regression to the mean, with average, and below average, numbers of severe weather outbreaks. Two points did not make a trend.

Today, the discussion is whether the current low cost of risk capital is a “new normal” or an aberration that will also revert to longer term averages. Uncertainty about the durability of alternative capital has impeded its adoption and integration into insurer balance sheets, though as we discuss elsewhere, much progress was made in 2014. Is the new price of cat risk sustainable?

There is no objectively correct price for catastrophe risk once premium covers expected losses and expenses. A case can be made that the levels the market is converging to today are the normal, whereas earlier higher pricing was the aberration. Strong capital adequacy supported by the ability to generate new companies and catastrophe bonds quickly mute the impact of previously market disrupting events, and the asset class continues to gain favor with investors.
For non-cat lines, where the risk premium is much smaller than for catastrophe risk, the scope for responsible rate reductions is less. However, even here the industry is performing well, especially by comparison to the market of the late 1990s. At that time, carriers scoffed at the idea of a sub-100 percent combined ratio. Reserves were inadequate and deteriorating. Coverage was being greatly expanded, buoyed by pre-Enron accounting, and a general dotcom-inspired faith in financial engineering. Today, the industry regularly operates sub-100 percent combined ratios, with the top quartile performers achieving sub-90 percent results. Reserves continue to prove adequate with releases being driven by lower than expected loss emergence rather than overly optimistic projections. Pricing is flat or slowly increasing in most lines: talk of rate reductions is commentary about a reduction in the rate of increases, not an absolute decrease. The industry continues to struggle to adapt to the “new normal” of improved safety, fewer auto accidents and fewer class action law suits, which is decreasing demand for traditional core products. At the same time there is a real need, and real demand for new coverages to absorb risk from cyber liability, and other technology related risks—to say nothing of the re-introduction of terrorism risk. For the industry, however, these changes come at the perfect time, with a huge supply of risk capital available to partner on new growth opportunities.

Alternative capital now 40 to 50 percent of global catastrophe reinsurance capital

Non-traditional capacity increased by more than USD12 billion through 2014, an increase of almost 25 percent to USD61.9 billion over 2013 which keeps it on track to reach our prediction of USD150 billion by 2018. While cat bond capacity still makes up a significant portion of the total capacity provided by the non-traditional market, it made only small increases over 2013 (up USD2.4 billion). By comparison, collateralized reinsurance increased over 25 percent from USD23.4 billion to USD 29.4 billion. Sidecar and ILW capacity continue to provide a smaller source of capital to the market, but also saw significant percentages increases, growing 50 percent and near 100 percent respectively.

Exhibit 2: Bond and collateralized market development

Source: Aon Benfield Securities, Inc.
As alternative capital gains more prevalence in the reinsurance market, critics have emerged attempting to draw parallels to prior new entrants like Unicover Managers (Unicover) and its dramatic collapse. These critics trumpet warnings that history will repeat itself, yet overlook the industry’s growth adaptations and push for transparency. Informed history can be a source of innovation—the reinsurance market learns from its deficiencies to grow stronger and more secure.

In 1999, Unicovers’ well-publicized downfall epitomized a variety of issues that ultimately caused a network of retrocession agreements to unravel. This left some counterparties suffering higher than anticipated losses due to in part to a lack of underwriting experience, excessive use of retrocession that eroded underwriting margins and limited alignment of interest between the operating company and the cedents. These and other factors left Unicovers’ cedents’ with an estimated USD1 to 2 billion in losses, according to the U.S Government Accountability Office.

The table on the following page illustrates the main pitfalls that befell Unicover and the fundamental differences of the today’s alternative reinsurance market that prevent similar events repeating themselves as it did 15 years ago.
### Exhibit 3: Comparison of Unicover Managers to Alternative Capital Providers

<table>
<thead>
<tr>
<th>Unicover Managers</th>
<th>Alternative Capital Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lack of experience in pricing reinsurance coverage that was triggered at unusually low thresholds, thereby increasing exposure to losses (e.g., coverage for losses on workers compensation policies exceeding USD50,000 instead of a threshold set in the millions)</td>
<td>More experienced underwriters/managers generally writing more remote risks</td>
</tr>
<tr>
<td></td>
<td>Some providers have formed partnerships with well-established reinsurers</td>
</tr>
<tr>
<td>A huge volume of workers compensation carve-out reinsurance business was quickly placed in the Unicover facilities and passed onto the retrocessionaires—an amount that far exceeded their expectations</td>
<td>Alternative market capacity has been existence since the 1990s</td>
</tr>
<tr>
<td></td>
<td>Majority of alternative market participants have been in the market for over 7 years</td>
</tr>
<tr>
<td></td>
<td>Traditional market typically writes the same coverage at the same or broader terms</td>
</tr>
<tr>
<td>Underlying workers compensation policies that were initially underpriced in the aggregate, were further exacerbated by an estimated USD500 million in various fees and commissions associated with multiple layers of reinsurance transactions</td>
<td>Business written at an expected underwriting profit</td>
</tr>
<tr>
<td></td>
<td>Large portion of the capital provided has a lower cost of capital and expected return than traditional markets capacity</td>
</tr>
<tr>
<td></td>
<td>Alignment of interest through participation by the traditional market</td>
</tr>
<tr>
<td>Weaknesses in corporate governance, internal controls and risk management did not ensure proper underwriting and limitations. Managing general agents/underwriters were “given the pen” to write workers compensation carve-out business generated through the Unicover facilities</td>
<td>Significant due diligence procedures undertaken prior to investment</td>
</tr>
<tr>
<td></td>
<td>Funds’ prospectuses outline the types of risk the funds may assume and limit the concentration of risk</td>
</tr>
<tr>
<td></td>
<td>Exit strategies via short term nature of investments and liquidity via secondary market for securities</td>
</tr>
<tr>
<td>The expectation of being able to collect fee or commission income while passing all, or virtually all, of the risk to another insurance company by means of reinsurance</td>
<td>Underlying risks are retained and shared by ceding companies</td>
</tr>
<tr>
<td></td>
<td>In certain Hedge Fund Re and sidecar structures, participation of the underwriter aligns its interests with investors</td>
</tr>
<tr>
<td></td>
<td>Principals are often shareholders in the fund’s management company to align themselves with investors. This provides an incentive to maintain prudent underwriting and risk management practices</td>
</tr>
</tbody>
</table>

Source: U.S. Government Accountability Office, Aon Benfield

The capital base of alternative capital providers is typically on managed funds from institutional investors, with a mandate to invest in structures related to natural catastrophe events. These funds invest in collateralized reinsurance, catastrophe bonds, industry loss warranties (ILWs) and sidecars. The structures are typically collateralized to the contract limit, minimizing the counterparty credit risk to cedents. These investments also have pre-defined maturities (ranging from one to five years). This provides funds with distinct exit strategies and the ability to better manage their capital positions.
Additionally, insurance-linked securities (ILS) provide investors with the ability to transfer securities before commutation, increasing the liquidity of the funds’ investments. This, coupled with marked-to-market accounting, provides investors with regular litmus tests of a fund’s performance and capital position.

Transparent structures of ILS transactions, low correlation with financial markets and relatively attractive returns have been the main reasons alternative reinsurance capital has grown from a nascent industry in the 1990s to a global network of capital managing USD62 billion in assets today. During this expansion, cedents have been able to expand coverage and terms, as well as enter into strategic relationships with alternative capital providers via collateralized sidecars. Throughout this growth period investors in alternative capital providers have achieved annual returns of around 8 percent which is consistent with funds’ target returns, typically 4 percent to 12 percent. These returns have come with relatively limited volatility compared to other fixed income markets, despite such events as Hurricane Katrina and large insured loss years like 2011. Recent historical loss experience, in fact, has performed better than the modeled loss results even when factoring in large insured loss events. The expansion is impressive when considering that traditional reinsurers are also writing the risk at similar return expectations.

As alternative capital continues to expand into other lines of business, such as casualty, partnerships are forming between experienced underwriters and large alternative investment managers with proven track records to establish new companies. These companies raise equity from the partners, as well as private equity funds and high net worth individuals. With industry veterans overseeing the underwriting operations, alternative investment managers invest a portion of the reserve in high-yielding investment strategies generating excess returns for the partnership and expand hedge funds’ lending base outside of traditional banks.

Since the catastrophe bond markets’ inception, 10 transactions have resulted in a loss of principal to investors out of the more than 300 transactions that have come to market in its nearly 20 year history. Of these 10 historical losses, 6 were the result of insured loss events and 4 were related to credit events in the vehicle’s collateral due collapse of Lehman Brothers, the party responsible for guaranteeing the bond’s collateral. With these losses, only one was disputed to the point of litigation or arbitration and it is important to note that in that case the sponsor recovered under the transaction as scheduled. It is standard in all catastrophe bonds that collateral supporting the transaction remains in the collateral account to the benefit of the sponsor to ensure prompt claims payment.
Reinsurer valuation remains low

The Aon Benfield Aggregate group of reinsurers (ABA) serves as a representative sample of the broader traditional reinsurance market. The stock market valuation of the ABA at September 30, 2014 was 1.03 times book value, very slightly up from the 0.99 times at June 30, 2014. Annualized ROE increased to 12.0 percent at 9M 2014, up from Q2 2014 (10.8 percent) and by comparison to 9M 2013 (11.4 percent).

Exhibit 4: Aon Benfield Aggregate common net income ROE, share repurchases, valuation, and reinsurer capital

*H 2014 has been annualized

Note: Common Net Income ROE, share repurchases and price/book charts relate to the Aon Benfield Aggregate group of companies

Source: Individual company reports, Aon Benfield Analytics
Third and Fourth Quarter 2014 Catastrophe Bond Transaction Review

The end of the 2014 calendar year marked a new record for annual property catastrophe bond issuance with a total of USD8.0 billion of limit placed. The groundbreaking period successfully continued the ascension of the catastrophe bond market since the financial crisis to surmount its prior annual peak of USD7.9 billion established in 2007. Although a record for property catastrophe bond issuance, the year fell just short of the record for total issuance (when including life and health transactions). Total issuance for 2014 reached USD8.2 billion.

As of December 31, 2014, total catastrophe bonds on-risk stood at USD24.3 billion—yet another record for the market and an 18 percent increase over the prior year period. This emphasizes the magnitude of the market’s expansion over a relatively short space of time.

During the second half of 2014, seven catastrophe bond transactions closed totaling USD2.3 billion. The range of risks included territories such as stand-alone California, North America and Japan. The peril of earthquake was well represented amongst the issuances, featuring in all seven transactions.

The table below summarizes the terms of the deals that closed during the second half of 2014:

**Exhibit 5: Third and fourth quarter 2014 catastrophe bond issuance**

<table>
<thead>
<tr>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary</td>
<td>Issuer</td>
</tr>
<tr>
<td>State Compensation Insurance Fund</td>
<td>Golden State Re II Ltd.</td>
</tr>
<tr>
<td>Everest Reinsurance Company (&quot;Everest Re&quot;)</td>
<td>Kilimanjaro Re Limited</td>
</tr>
<tr>
<td>California Earthquake Authority</td>
<td>Ursa Re Ltd.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>United Services Automobile Association</td>
<td>Residential Reinsurance 2014 Limited</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Amlin AG</td>
<td>Tramline Re II Ltd.</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>American International Group, Inc.</td>
<td>Tradewynd Re Ltd.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>National Mutual Insurance Federation of Agricultural Cooperatives (&quot;Zenkyoren&quot;)</td>
<td>Nakama Re Ltd.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Closed During Q3 and Q4 $2,325

Source: Aon Benfield Securities, Inc.

1 Aon Benfield Securities’ 2014 issuance figure excludes almost USD500 million in new issuance through private ILS structures
2 Expected loss represents one-year annualized figures with WSST sensitivity when applicable
Fourth quarter 2014 catastrophe bond transaction review

Everest Re’s Kilimanjaro Re Limited Series 2014-2 Class C notes successfully pushed the boundaries of the market. The transaction, which was Everest Re’s second time in the market during 2014, is the largest transaction with a term of five years. The notes provide Everest Re with USD500 million of earthquake coverage in Canada and the United States.

The California Earthquake Authority (CEA) returned to the catastrophe bond market in the fourth quarter, introducing a new program, Ursa Re Ltd. The latest transaction for the CEA is the largest yet by USD100 million and provides California earthquake indemnity coverage on an annual aggregate basis.

Through its second issuance, Tramline Re II Ltd. provides Amlin AG U.S. named storm and earthquake coverage along with Europe windstorm for a higher risk layer than typically seen in 2014 new issuances. The transaction has an expected loss of 5.71 percent and closed at an interest spread of 9.75 percent. Strong investor demand during the marketing period for the higher yielding transaction resulted in it closing below initial guidance.

Tradewynd Re Ltd. Series 2014-1 provides American International Group with expanded indemnity coverage to now include named storms in Canada and Mexico, as well as earthquakes in Mexico. The USD500 million transaction includes three classes of notes with maturities ranging from one to three years. The latest transaction brings the total from Tradewynd Re Ltd. to over USD1 billion.

Finally, to close the year, Nakama Re Ltd.’s Series 2014-2 issuance provides Zenkyoren USD375 million in coverage split between a four-year per occurrence and five-year floating three-year term aggregate structure. Total issuance for the Nakama Re Ltd. program in 2014 is USD675 million.

The chart on the next page shows catastrophe bond issuance by half year since 2007.
Aon Benfield Securities expects 2015 will be another active year for catastrophe bond issuance, fueled by the continued growth in alternative capital and cedants’ increasing comfort with utilization of insurance-linked securities in their risk transfer programs.
Slow Demand Growth and Continued Product Evolution

Insurer capital increased by 6 percent during the first nine months of 2014 ending the period at USD 4.2 trillion. While some cedents modified structures as a result of the continued downward trend in pricing and new capacity providing alternatives to traditional occurrence structures, overall demand for reinsurance remained relatively stable year over year in major markets, with some non-peak regions looking for additional capacity (up to 5 percent) during January 2015 renewals.

Exhibit 7: Change in global insurer capital

Following stronger increases in most major lines throughout the last three years, rate increases in the U.S. for primary insurance slowed, and the industry saw the first decreases in commercial property throughout 2014 (down 2 percent). Umbrella, general liability, workers’ compensation, and commercial auto saw increases of 0.70 percent, 0.65 percent, 2.5 percent, and 2.75 percent, respectively.

Exhibit 8: U.S. primary pricing trend

Source: Aon Benfield Analytics

Source: Council of Insurance Agents & Brokers
2014 Global Catastrophe Losses Well Below Average

Insured global catastrophe losses in 2014 were at their lowest levels since 2009. With the exception of severe weather (convective storm) and winter weather, the rest of the natural disaster perils were either at or below their recent 10-year averages (2004-2013). For the third consecutive year, catastrophe-related losses continue to decline following a record year in 2011 in which the insurance industry and government-sponsored programs paid out more than USD132 billion (2014 USD).

Exhibit 9: Insured losses by year by type (2004-2014)

Global insured losses in 2014 were tentatively listed at USD39 billion (subject to change), which is down nearly 38 percent from the 10-year average of USD63 billion. The losses are down 20 percent from those sustained in 2013 (USD49 billion) and down 49 percent from 2012 (USD77 billion). Severe weather events comprised roughly 48 percent of the losses in 2014, primarily driven by billion-dollar events in the United States and Europe. A multi-billion-dollar February winter weather insured loss event in Japan due to considerable snowfall and ice was one of the costliest ever for the country’s industry; while frigid sub-zero temperatures and heavy snow caused heavy losses in the U.S. in January. More than USD35 billion—or 89 percent—of overall global losses were sustained in the U.S., Asia, and Europe.

To find the most up-to-date global catastrophe loss data for 2014, and other historical loss information, please visit Aon Benfield’s Catastrophe Insight website: www.aonbenfield.com/catastropheinsight
Every region of the world sustained below average annual insured losses in 2014. North America (Non-U.S.) and Asia were closest to their 10-year averages. The landfall of Major Hurricane Odile in Mexico’s Baja Peninsula led to a more than USD1.1 billion industry loss, which was the second-costliest in the country’s history (only behind 2005’s Hurricane Wilma). Hail and wind events in Canada also helped increase loss totals in North America (Non-U.S.) In Asia, Japan and India drove much of the losses for the continent. Japan’s February snow and ice event caused a multi-billion-dollar loss; while India noted two events each individually leading to more than USD650 million in claims payouts (Cyclone Hudhud and the worst flood event in 60 years in northern India).

Elsewhere, Europe again was impacted by severe summer hailstorms. One particular June event caused upwards of USD3.0 billion in payouts across portions of France, Germany and Belgium. This is the second consecutive year in which the industry in France and Germany have paid out a multi-billion bill for the peril. An active windstorm season and heavy flooding caused elevated losses in the United Kingdom and other sections of western and northern Europe. It is worth noting that the costliest economic event of the year for the continent—USD4.5 billion from massive flooding in southeast Europe’s Balkans region—led to minimal insured losses of USD125 million given very low insurance penetration.

The United States endured well-below normal losses: roughly 51 percent less than the 2004-2013 norm. The total was even less than in 2013 (USD23 billion) and significantly lower than in 2012 (USD68 billion), which was dominated by Hurricane Sandy and a severe drought. 2014 was another very quiet year for hurricane activity in the U.S. despite Hurricane Arthur making landfall in early July along the outer banks of North Carolina. That storm caused a negligible amount of damage. As a reminder, the U.S. remains in the midst of a record-setting stretch without a major hurricane landfall (Category 3+). 2005’s Hurricane Wilma was the last such event.

Oceania, Africa, and South America all endured below-average insured losses as well in 2014.
Thunderstorms becoming costlier for worldwide insurers

For the second consecutive year, the severe thunderstorm peril (tornado, hail, straight-line winds) was the costliest for the global insurance industry. While the majority of the losses are driven by events in the United States, other parts of the world are also noting significant levels of claims payouts from the peril. According to NOAA’s National Severe Storms Laboratory (NSSL), there are an estimated 16 million thunderstorms worldwide each year (including 100,000 alone in the U.S.) and roughly 2,000 thunderstorms in progress at any given moment.

Since 2010, billion-dollar insured loss events attributable to convective thunderstorm events have occurred in the United States, Canada, France, Germany, and Australia. Overall global industry losses for the peril dating to 1990 have averaged more than USD10 billion (2014 USD), and losses have trended upward with an annual increase of 6.0 percent during this timeframe. When looking at data dating to 2000, the average has increased to USD13 billion (2014 USD) with a slightly accelerated 8.8 percent annual growth trend.

While much of the media attention is often focused on tornadoes, industry officials are quick to confirm that the majority of the losses resulting from thunderstorm claims are due to hail. There are certainly exceptions to this rule in the case of catastrophic tornado events (including such recent U.S. tornadoes as Joplin, Missouri in 2011, Tuscaloosa, Alabama in 2011, Moore, Oklahoma in 2013) where losses top USD1.0 billion, though that has not historically been the primary driver of the peril cost.

Assessors often report that hail stones ranging from pea-sized to as large as softball-sized can many times lead to a total loss that is costly for the insurer. Punctured roofs in homes, shattered windows and dented vehicles are the most commonly reported as hail falling from thunderstorm clouds can sometimes travel to the surface at speeds of up to 100 mph (160 kph). Damage reports often highlight that uncovered car rental facilities are the most vulnerable during hail events.

**Exhibit 11: Global severe weather losses (1990-2014)**

![Global severe weather losses graph](image-url)

Source: Aon Benfield Analytics
The United States is the undisputed leader in severe weather and resultant losses given the unique geographical layout that is highly conducive for thunderstorm development. Several pockets of the country such as the Central Plains, Southeast, Midwest, and the Rockies are often regularly inundated with convective storm claims during the year. The U.S. insurance industry has noted more than USD10 billion in claims payouts from thunderstorms in every year since 2008, with the peak coming in 2011 (USD28 billion). Prior to 2008, the U.S. industry had only had one such year (2003) that topped this threshold. Based on data from NOAA’s Storm Prediction Center, the losses have maintained elevated levels despite three straight years with historically low numbers of tornadoes. This helps to verify that hail and damaging straight-line winds is the predominant driver of payouts.

The exhibit on the next page provides a look at local storm reports that have been recorded by the U.S. Storm Prediction Center since 2000. Please note that NOAA changed its minimum hail size criterion from 0.75 inch to 1.00 inch in 2010. This explains the significant drop-off in hail reports.

Exhibit 12: Severe thunderstorm reports in the United States (2000-2014)

Similarly to the United States, there has been a gradual uptick in severe weather insured losses in parts of Canada, Europe and Australia since 1990. One area that has particularly seen recent growth in severe weather costs is in Canada’s Alberta province. Since 2011 alone, the Insurance Bureau of Canada notes that the province has sustained nearly USD3.0 billion in severe weather-related payouts—a substantial sum for the country’s industry. In Australia, the Insurance Council of Australia cites that the major metro areas of Sydney, Melbourne, Perth, and Brisbane have all registered a USD1.0 billion industry hit from severe storms since 1999. Additional multi-billion-dollar hailstorms have occurred in France and Germany in consecutive years in 2013 and 2014.

There are several potential and likely reasons for these increases, including some that regularly lead to rigorous debate. The purpose of this piece was to primarily focus on the peril losses on their own merit.
Rating Agency and Regulatory Update

Impact on reinsurance demand = slight increase

There are a number of rating agency and regulatory related topics that can influence reinsurance demand, which vary by the need for each ceding company.

**Exhibit 13: Key rating agency and regulatory topics impact on reinsurance demand**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Impact</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Management</td>
<td>Neutral</td>
<td>As industry capital continues to grow towards record levels, some companies are choosing to reduce their reinsurance purchases while others are increasingly using reinsurance as a capital management tool.</td>
</tr>
<tr>
<td>Stochastic BCAR</td>
<td>Slight Increase</td>
<td>The target for release of the Request for Comment on A.M. Best’s Stochastic BCAR model is late Q1 2015. In addition to changes to the capital factors, A.M. Best is reevaluating the catastrophe risk charge metric which will impact most companies. While we did not see this drive much demand at 1/1, it will likely impact demand in 2015.</td>
</tr>
<tr>
<td>Expiring TRIA</td>
<td>Slight Increase</td>
<td>Rating agencies did not take immediate action on ratings due to expiration of TRIA. However, there will be near-term scrutiny on execution of action plans, with some including reinsurance. Also, scrutiny on net retained exposure will increase the longer TRIA is not renewed.</td>
</tr>
<tr>
<td>Evolving Criteria</td>
<td>Neutral</td>
<td>Rating agencies continue to apply new criteria that influence capital requirements. They include: A.M. Best’s Stochastic BCAR, S&amp;P’s sovereign risk stress test, Moody’s stress testing, and Fitch’s risk based capital models.</td>
</tr>
<tr>
<td>Regulatory Developments</td>
<td>Slight Increase</td>
<td>Regulators are strengthening capital requirements. Changes include updated RBC models and new stress testing requirements, while others indirectly impact capital needs by requiring companies to obtain a rating.</td>
</tr>
<tr>
<td>Catastrophe Risk Tolerance</td>
<td>Neutral</td>
<td>Rating agency surveys, stress testing and public disclosures are leading to a focus on establishing a clear risk tolerance (especially on peak exposures).</td>
</tr>
</tbody>
</table>

Source: Aon Benfield Analytics
Rating agency capital remains strong; focus is on capital and risk management

For the second consecutive year upgrades outpaced downgrades from A.M. Best and S&P. A.M. Best carries a negative outlook on the commercial sector due to deficient loss reserves and low investment yields, while all rating agencies carry a stable outlook for personal lines. We expect capital adequacy to remain strong as U.S. non-life industry capital reached a record level at USD689 billion as of Q3 2014. Median BCAR scores for U.S. non-life companies illustrate how well capitalized insurers are at different rating levels.

Exhibit 14: Median U.S. non-life company BCAR scores

<table>
<thead>
<tr>
<th>FSR</th>
<th>Min.</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014E</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A++</td>
<td>175</td>
<td>292</td>
<td>284</td>
<td>298</td>
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<td>A+</td>
<td>160</td>
<td>328</td>
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<td>267</td>
<td>&lt;11&gt;</td>
</tr>
<tr>
<td>B++</td>
<td>115</td>
<td>230</td>
<td>232</td>
<td>219</td>
<td>216</td>
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<tr>
<td>B+</td>
<td>100</td>
<td>179</td>
<td>172</td>
<td>175</td>
<td>198</td>
<td>198</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Aon Benfield Analytics, A.M. Best

The reinsurance sector is currently on negative outlook by all major rating agencies. The main drivers are increased client retentions, excess capacity, and deteriorating underwriting discipline. With the recent lack of major catastrophe losses, primary insurers have been able to retain more due to a stronger capital base and greater access to alternative markets. The capital boost is enabling these companies to retain more profitable business while ceding less profitable lines. Reinsurers have been broadening terms and conditions to combat the excess supply of capital responsible for creating the current “buyers’ market,” putting pressure on underwriting margins.

Key rating agency topics for 2015

- Impact of stochastic BCAR and related catastrophe risk charge on capital adequacy
- Renewal of TRIA program and managing terrorism exposures
- Emphasis on ERM with specific focus on risk tolerance, stress testing capital and emerging risk management (such as managing TRIA expiring and cyber exposures)
- Maintaining profitability and reserve adequacy. Ability to continue profitability despite competitive market conditions, reduced reserve releases, and low investment yields.
- Increasing merger and acquisition activity
Evolving criteria influences capital requirements

Rating agencies continue to apply new criteria that influence capital requirements. They include: A.M. Best developing stochastic BCAR, S&P’s implementation of sovereign risk criteria, Moody’s approach to stress testing, and Fitch developing risk based capital models for EMEA, APAC, and Latin America.

Stochastic BCAR to be released in 2015

A.M. Best’s new stochastic-factor BCAR model (“stochastic BCAR”) is expected to be released in late Q1 2015. The potential impact on individual companies’ primary measure of capital adequacy remains largely unknown. While model results will be calibrated to current industry capital levels, individual company results may vary meaningfully. A.M. Best continues to evaluate the proposed model.

The model layout will be very similar to the current BCAR model with capital charges for asset, underwriting and business risks determining net required capital. Similarly, adjusted surplus will be based upon reported surplus with adjustments for items such as unrealized gains on bonds, credit for surplus notes and a catastrophe risk charge, among others. While the model layout will be very similar, there are noteworthy enhancements being incorporated:

- Evaluate capital adequacy at various confidence intervals
- Stochastically developed capital factors with varying risk charges for pricing, reserving, asset and credit risks by company by confidence interval
- Diversification benefit for premium and reserve risk will be based upon correlation matrices replacing a simple formula based upon largest line of business
- Results may be translated to a common confidence interval (e.g., B+) then providing company specific BCAR targets for capital adequacy at various rating levels

A.M. Best is continuing to evaluate the catastrophe risk charge of the model. There are certain aspects that A.M. Best has determined:

- Separate return periods by peril will no longer occur; determination to use same return period for each significant peril or change to single, All Perils metric has not yet been finalized
- Consideration for use of return period above 100yr (VaR) or use of a TVaR metric
- Expect to maintain a post-event stress test – second event protection to remains relevant in A.M. Best’s determination of a company’s ability to trade forward
- Catastrophe charge may vary by confidence interval
Below is a timeline depicting key stages in the process for implementing the new stochastic BCAR model. There are many interim steps within each stage, which may impact timing and duration.

**S&P implements sovereign risk criteria**

In late 2013, S&P released its finalized methodology outlining under the specific circumstances and by how much an entity’s rating can be above the sovereign rating. An entity can now be rated above the sovereign’s foreign currency rating if S&P believes there is a significant possibility that the entity would not default if the sovereign defaults. For insurers where the sovereign is rated ‘A+’ or lower, a stress test would apply where various asset values exposed to a specific sovereign would be haircut by varying amounts and compared to available regulatory surplus. A liquidity test comparing the stressed asset values to various life and non-life liabilities would also be performed. If the regulatory surplus exceeds the total amount of haircuts and the liquidity ratio is above 100 percent, the company would “pass” the test and be allowed to have a rating of up to two (life, health and composite re/insurers) or four (non-life re/insurers) notches above the sovereign. For insurers where the sovereign rating is ‘AA-’ or better, mitigation characteristics against a sovereign stress scenario will be analyzed.

**Moody’s approach to stress testing**

During Moody’s 2014 North American Insurance Executives Conference key updates to the methodologies were discussed, which included:

- Noted adoption of standard adjustments made to financials
- Updated operating environment factor
- For non-life, tightened rating bands associated with reserve adequacy analysis
- For life, there was enhanced discussion of liquidity ratio
- Enhanced discussion of scenario and stress testing
For the discussion on stress testing, Moody’s indicated they were standardizing their approach to stress testing with a specific focus on the effect of the Financial Crisis. Their approach is to examine insurers against a set of pre-defined stress scenarios to key risks, with a focus on near to medium term shock events. Moody’s focus is more on general shock events (e.g., 1-in-250 year event) and not necessarily repeats of historical actual events like the Financial Crisis or Hurricane Katrina. In Moody’s evaluation, if severe stress scenarios suggest a rating three or more notches below the current rating, the current rating may be lowered to reflect potential rating transition risk post event.

**Fitch releases factor based model for EMEA**

After a three month public consultation in Q4 2013 and a beta-test through the first seven months this year, Fitch Ratings released their deterministic risk-based capital model called “Prism Factor-Based Capital Model (Prism FBM)” for use on EMEA insurers. The model is used as a tool to assess an insurer’s capital strength and enables the agency to compare companies on a consistent basis despite writing different business lines in various regions and using different accounting standards. A Prism FBM model is expected to be released for Asia Pacific and Latin America in early 2015.

**TRIA expires, but no impact on ratings (yet)**

While rating agencies monitored TRIA renewal discussions and analyzed potential impact throughout 2014, they expected a TRIA extension to be passed. Rating agencies expect some type of federal backstop for terrorism to be passed in early 2015, however they will continue to closely monitor insurer risk profiles and the legislative session.

Potential rating impact from A.M. Best’s perspective will be based on management’s ability to effectively execute action plans previously presented in response to a terror stress test scenario. If TRIA is not renewed in the near-term, some companies may have a terror risk charge higher than the current natural catastrophe PML charge used in baseline BCAR. In addition, A.M. Best is concerned how an absence of TRIA impacts management’s risk tolerance, given increases in net exposure.

The S&P capital model does not currently have an explicit charge for terror risk, however with TRIA expiring it may lead to consideration for a terror risk charge or change in IICRA for the U.S. non-life industry. Terrorism exposure may also be reflected through a company’s competitive position, risk position, or ERM framework. S&P noted they may review ratings on issuers they believe are less prepared depending on how TRIA legislation develops. Moody’s has stated that the non-renewal of the program is a credit negative for insurers. They expect that TRIA’s non-renewal will result in market dislocation; coverage becoming more costly and less widely available, and in some cases, potentially unavailable in large urban markets.

In short, uncertainty creates rating pressure. The longer the industry is without a federal terrorism backstop, the more rating agency scrutiny will increase on net exposures. This will lead to an increase in demand for reinsurance protection or a reduction in exposures.
Regulatory developments on the horizon

Draft of Insurance Capital Standards (ICS) released for public comment

On December 17, the International Association of Insurance Supervisors (IAIS) released a draft of proposed risk-based global capital standard for internationally active insurance groups (IAIGs). The criteria to be considered an IAIG are:

- Gross premium written from three or more jurisdictions with at least 10 percent being outside of home jurisdiction
- Gross premium written is greater than USD10 billion—or—total assets are greater than USD50 billion

We estimate 36 groups worldwide currently meet the criteria.

The draft outlines two approaches:

- A market-tested approach to valuation, which requires adjustments to be made to GAAP valuations
- The second method is based on existing GAAP rules, where the approach uses assets and liabilities as reported under existing accounting rules in each jurisdiction

The IAIS is requesting public comment on its draft by February 16, 2015. The IAIS expects to conduct quantitative field testings in 2015 and 2016, and plans to finalize the ICS by December 2016.

Solvency II

As we get closer to the January 1, 2016 launch date for the Solvency II regime, EIOPA has been busy with various public consultations on Implementing Technical Standards (ITS) and Guidelines with an aim to have finalized and legally binding ITS by October 2015. More important for the moment though are the recently released results of EIOPA’s Insurance Stress Test 2014. The Stress Test involved at least 50 percent of the insurers in each EU country which were subjected to two separate sets of tests—Core Module and Low Yield Module.

Before application of the stress test, 14 percent of the 167 groups and companies participating in the Core Module test had a Solvency II capital ratio (SCR) below 100 percent (one of them a top 30 European group), and 8 percent were below the MCR (the level at which a regulator has to intervene). In the Core Module, 44 percent would see their SCR drop below 100 percent under the most severe “double hit” (i.e., decrease in asset values and persistent low risk free rates) scenario. In the Low Yield Module, 24 percent of the companies failed to maintain an adequate SCR.

The results of the Stress Test demonstrated that some companies, especially the smaller ones, are not yet adequately prepared for Solvency II and there is a need for companies to “right-size” their balance sheet risks relative to available capital. Reinsurance solutions such as proportional, excess of loss, loss portfolio transfers and adverse development covers can help in this regard. Another option is consolidation via M&As.
Following the release of the Stress Test results, EIOPA also released a Common Application Package for Internal Models that insurers have to use in order to get approval for its use over the Standard Formula capital model. The Package details the granularity of documentation and evidence required for the application process. To support companies in their preparations and transition to the new regime, the UK regulator (PRA) conducted a data assessment exercise on how firms are determining capital requirements for Solvency II. They found that some firms were optimistic in certain assumptions and thus failed to properly consider catastrophic and market shocks at higher return period in their models. As firms become more pragmatic in their underlying assumptions, it is likely to lead to an increase in capital requirements and thus the need for capital solutions.

APAC

Many Asia Pacific markets are continuing to strengthen solvency regulations. Examples include China, Hong Kong, and Labuan (an off-shore financial center, part of Malaysia) moving to an RBC regime. Singapore is implementing RBC 2 and Japan aims to introduce economic value-based solvency regime soon. As few Asia Pacific insurers are rated by global rating agencies, regulatory requirements are the main driver behind capital requirements for most insurance companies in this region.

China’s Risk Oriented Solvency System (C-ROSS) may be the most important regulatory change in this region. Similar to Solvency II, C-ROSS has three supervisory pillars—quantitative capital requirements, qualitative supervisory requirements, and market discipline mechanism.

The main features of non-life C-ROSS quantitative capital requirements include:

- The available capital of an insurer is classified into different tiers
- Required capital for: insurance risk, market risk, credit risk, control risk, and macro-prudential risks
- Evaluation under a base scenario and various adverse scenarios
- Non-life insurers’ business classified into ten lines (currently no classification exists)
- Catastrophe risk capital requirements introduced (as part of insurance risk) with factors assigned at province level and 10,000 scenarios developed for each peril (earthquake and typhoon)
- Credit risk factors for reinsurance assets significantly lower for on-shore reinsurers that meet CIRC’s solvency requirement

CIRC commented that C-ROSS is expected to push non-life insurers to optimize their business structure as well as adjust their investment portfolio and reinsurance counterparties. CIRC has made it clear that C-ROSS is not meant to increase capital pressure on the insurers. Instead, it is introduced mainly to better reflect the risks insurers face. The third-round of industry-wide testing concluded in mid-November. So far, CIRC has not announced when non-life C-ROSS will be implemented, although it is widely believed that the regulator plans to start a test run in 2015 and formally implement the new regime in 2016.
Latin America

For insurers eager to enter and expand in the region, each country has specific regulatory requirements. Examples include requirements for use of local reinsurers, minimum rating of reinsurers, investment in the local economy, investment liquidity and changing the independent actuary and auditor on a routine basis. Each country has minimum capital requirements, with countries like Brazil, Chile, and Mexico incorporating risk-based capital to determine capital requirements. In addition, countries like Mexico and Peru require insurers to publish to ratings, which generally impose higher capital requirements, all else being equal.

United States

For 2013, U.S. property & casualty risk based capital (RBC) requested two new risk charges for catastrophic events for informational purposes. The charges were for Earthquake and Hurricane (100 year return period, aggregate perspective) only, with other catastrophe risks excluded. The catastrophe risk charge also incorporated a contingent credit risk charge for ceded losses excluding recoveries from mandatory pools and affiliates, as well as a reduction in the premium capital factor to avoid double counting of catastrophe losses.

In 2014, the NAIC Catastrophe Risk Subgroup requested feedback on the proper sorting method in determining the catastrophe risk charge, which seven firms responded. Also, four firms offered support to lower the contingent credit risk charge (currently set at 10 percent). In addition to providing feedback on the two preceding items, Aon Benfield presented support for using occurrence exceedance probability (OEP) results rather than aggregate exceedance probability (AEP) results, which is more appropriate and consistent with how most companies manage their gross and net catastrophe exposure. All three items are still currently being discussed by the NAIC Catastrophe Risk Subgroup. Nonetheless, with an expected implementation date of 2015 (filing March, 2016), incorporating a catastrophe risk charge in the RBC calculation will influence some demand, mostly smaller insurers that are not rated.

The NAIC Risk Management and ORSA Model Act’s takes effect January 1, 2015. Own Risk Solvency Assessment (ORSA) filing requirements are required for a single company with gross premiums written greater than USD500 million or a group with gross premiums written greater than USD1 billion. ORSA is intended to provide a more integrated view on a company’s ERM, risk assessment including stress testing of key risk exposures, and prospective solvency assessment on the group level. Regulators should be able to utilize ORSA reports to more accurately determine the scope, depth and minimum timing of risk-focused financial analysis and examination.

Most companies domiciled in states that passed legislation adopting the NAIC model act have been actively preparing for the ORSA filing requirement due sometime during 2016. Based on feedback from several state insurance departments, NAIC and our clients, states with enacted ORSA law generally are taking a cooperative approach with insurers on setting the filing deadline.
M&A Activity Update—Increasing Focus

Merger and acquisition activity in the global insurance and reinsurance market continued to accelerate in 2014. According to Capital IQ, the global insurance sector M&A deal volume through December 26, 2014 totaled USD33.6 billion with 691 deals, compared to USD24.8 billion and 601 deals for the same period of 2013, a deal value increase of almost 36 percent.

In December alone, several meaningful U.S. transactions were announced (estimated deal value in USD millions), including Assured Guaranty’s acquisition of Radian’s Financial Guaranty business (USD810), ACE’s acquisition of Fireman’s Fund Personal Lines business (USD365), and Progressive’s acquisition of ARX Holdings (USD875); plus the confirmed merger negotiations between XL Group and Catlin Group.

In general, this recent increase in M&A activity was driven by the acquirers’ desire to expand (i) geographically, (ii) into new products or distribution or (iii) scale and efficiencies. We believe that this acquisition motivation will continue to be supplemented by sellers becoming increasingly focused in divesting books of business that do not earn its cost of capital.

A summary of the current market trends affecting capital raising and M&A activity is as follows:

- **Reinsurer and insurer stock price performance continued to be positive with average Aon Benfield Securities Index expansion at 12.5 percent**. As summarized in the Aon Benfield Securities Weekly Public Market Recap, most global reinsurers’ and insurers’ stock price appreciation was positive but not as strong as the 2013 rebound appreciation.

- **The resulting tangible book value multiples remain at the pre-crisis levels reached last year**. For many reinsurers and insurers, especially specialty commercial (1.53x) and personal line insurers (2.05x), the pre-crisis TBV multiples achieved last year have been maintained.

- **Increasing pressure on underlying organic results will drive additional M&A**. Whether the pressure on earnings and returns is from new alternative market capacity or from traditional challenges (e.g., low interest rates, reduced favorable reserve development), the need for improved capital utilization and operational efficiencies will increasingly stimulate buyers’ interest.

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3 Based on publicly disclosed deal values in the global insurance brokerage, multiline, property and casualty and reinsurance subsectors.
4 Based on YTD performance through December 26, 2014.
5 Aon Benfield Securities Weekly Public Market Recap is prepared and distributed to Aon Benfield clients each week. Please call your Aon Benfield representative to be added to the distribution list.
6 Price to 9/14 Tangible Book Value multiple as of December 26, 2014.
Hedge fund desire to develop permanent capital vehicles continues but the formation requirements have risen. Hedge funds continue to desire establishing off-shore reinsurers to obtain a permanent asset base and provide investors with a more tax efficient investment vehicle and greater future liquidity. Given the challenging global reinsurance market conditions, A.M. Best has become more skeptical with NewCo operating plans and strategies. In order to achieve the required A.M. Best A- rating, a NewCo Reinsurer will need to include an experienced management team with a credible strategy to produce competitive operating results in these challenging markets.

Over the near term, Aon Benfield Securities expects strategic investors to pursue consolidation in a focused “bolt-on” approach expanding into new geographies or products via acquisitions of underwriting teams or specialty units. Over the medium to longer-term, however, we expect the need to grow and improve returns via traditional whole-company M&A will intensify.
Economic and Financial Market Update

The global economy

The growth of many economic regions slowed into the middle of 2014. There was significant weakness in Europe as the German and French economies both contracted in the second quarter before recovering somewhat in the third, and Japan’s economy unexpectedly went into recession with a 0.5 percent contraction in the third quarter. After a weak weather-related first quarter, the U.S. economy has continued to perform strongly, growing 1.0 percent in the third quarter and the UK has also been a bright spot in 2014 with GDP growth of 0.7 percent in the third quarter.

In its October 2014 World Economic Outlook, the International Monetary Fund further trimmed its global growth projection for 2014 and 2015. Weakness in the Eurozone, Japan, and developing markets were contributory factors.

Exhibit 15: GDP projections

<table>
<thead>
<tr>
<th>Percent</th>
<th>2012</th>
<th>2013</th>
<th>2014p</th>
<th>2015p</th>
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<tr>
<td>World</td>
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<td>3.3</td>
<td>3.3</td>
<td>3.8</td>
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<tr>
<td>Advanced economies</td>
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<td>1.8</td>
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<tr>
<td>Euro area</td>
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<td>0.4</td>
<td>0.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Germany</td>
<td>0.9</td>
<td>0.5</td>
<td>1.4</td>
<td>1.5</td>
</tr>
<tr>
<td>France</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>1.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.3</td>
<td>1.7</td>
<td>3.2</td>
<td>2.7</td>
</tr>
<tr>
<td>United States</td>
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<td>2.2</td>
<td>2.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Japan</td>
<td>1.5</td>
<td>1.5</td>
<td>0.9</td>
<td>0.8</td>
</tr>
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<td>Emerging market and developing economies</td>
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<td>4.7</td>
<td>4.4</td>
<td>5.0</td>
</tr>
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<td>2.8</td>
<td>2.7</td>
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</tr>
<tr>
<td>China</td>
<td>7.7</td>
<td>7.7</td>
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<td>7.1</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>2.9</td>
<td>2.7</td>
<td>1.3</td>
<td>2.2</td>
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</tbody>
</table>

Source: IMF World Economic Outlook

Nevertheless, downside risks remain, and the greatest concern is a major slowdown in the euro area leading to a deflationary period of stagnation.

During December, attention has focused on the price of oil. The price of benchmark Brent crude has tumbled from USD115 per barrel at June 2014 to under USD60 at mid-December. Lower oil prices are generally seen as a positive economic influence, at least for those economies which are net consumers. However, financial markets appear to be focused on the lower than expected demand and worried that this reflects underlying economic weakness, rather than on excess supply. The imbalance between supply and demand is unlikely to be resolved in the short term. This situation contrasts with the comments from the IMF as recently as October when it cited a spike in oil prices arising from tensions in the Middle East as one of its major risk factors to the global economic outlook.

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7 IMF World Economic Outlook, October 2014
The scale of the current oil shock is significant, putting enormous strains on many of the resource-led economies and particularly those such as Russia and Venezuela, which have financed much of current expenditures from oil revenues. The development of shale reserves in the U.S. has been an important factor in the nation’s near self-sufficiency in oil but a sustained low price will likely put the development of new facilities on hold.

Exhibit 16: Brent crude price

![Brent crude price chart](image)

Source: Bloomberg

The EU debt crisis

Financial market worries over peripheral European sovereign debt receded through most of 2014 as financial markets gained further confidence in the political will to manage through the eurozone’s problems. Localized concerns have re-emerged in Greece, exacerbated by the announcement of a snap presidential election, which have sent the 10-year government bond yield back over the critical 7 percent level which was a previous trigger for intervention by the European Central Bank. Elsewhere, yields have drifted lower and remain well below 7 percent. The yield on German 10-year government bonds is currently at an all-time low, at around 0.6 percent.

Exhibit 17: Eurozone 10-year Government bond yields

![Eurozone 10-year Government bond yields chart](image)

Source: Bloomberg (data as of December 16, 2014). * Ireland is 5-year
Financial markets

Governments around the world have targeted low interest rates and expansive monetary policy as key measures to stimulate economic recovery and rates are expected to remain low through 2015. The key U.S. Federal Funds Rate has been kept at a record low of 0.25 percent since December 2008 and the UK Bank Rate has been at 0.5 percent since March 2009. In response to concerns over disinflation and to promote sustainable growth, the European Central Bank (ECB) lowered its benchmark Main Financing Rate by 0.1 percentage point to 0.15 percent on June 2 and again on September 4, lowering the rate to 0.05 percent. To maintain the rate differential the ECB took the unusual step of introducing a negative interest rate on its deposit facility, lowering the interest rate on overnight deposits with the bank firstly from zero to -0.1 percent and then again to -0.2 percent.

Exhibit 18: Five-year Government bond yields

After a jump in mid-2013, the yield on five-year Eurozone government debt has fallen back during 2014 to 0.08 percent at mid-December in response to weak economic data and an expectation that the ECB will start a program of asset purchases to provide economic stimulus. The yield on UK government bonds has fallen back from mid-year, reaching 1.21 percent at mid-December, while U.S. Treasuries have been steady in a range of 1.5 percent to 1.7 percent, dropping to 1.51 percent at the end of the period. The yield on Japanese bonds started the year at 0.25 percent, falling gradually to 0.08 percent at mid-December.

Source: Bloomberg
Investors’ credit risk appetite continued to grow through 2014 as spreads over Treasuries/government bonds tightened during the first half of the year before drifting out in the second half, and insurers and reinsurers have increased their allocation to this class in the face of very low yields on government securities. The spread of U.S. AA rated issues fell to 0.12 percentage points over Treasuries at mid-December, having dipped below that of Treasuries on several occasions. Spreads on lower rated issues widened during the second half. In Europe, spreads continued to trend down.
The performance of equity markets over 2014 was mixed, with bouts of weakness in September and December. The U.S. market performed strongly and at mid-December, the S&P 500 index was up 8.7 percent since the start of the year while the MSCI World index rose 3.6 percent. Japan’s Nikkei index exhibited greater volatility but ended the period up 7.4 percent, thanks to a strong performance during the final quarter. Stock markets in Europe (Eurotop 100) and the UK (FTSE 100) showed a more muted performance over the period, ending up 0.1 percent and down 6.7 percent, respectively.
Bank Leverage

Analysis of the 20 largest banks globally shows that total asset leverage, measured by total assets to shareholders’ equity continues to decline. Since year end 2013, ratios have declined steadily from 19.4 to 18.3. Implementation of the leverage ratio requirement begun in January 2013, and any final adjustments to the definition and calibration of the leverage ratio will be made by 2017, with a view to migrating to a Pillar 1 treatment on January 1, 2018 based on appropriate review and calibration.

As of October 2014, Basel II had been adopted by 27 of the 28 Basel Committee member jurisdictions, with Russia still expected to have made final strides towards adoption yet in 2014. Basel 2.5 has been adopted by 24 jurisdictions, and the risk based capital component of Basel III has been adopted by 23 with varying degrees of progress in rulemaking for the remaining countries that have not adopted the various levels.

Exhibit 21: Top 20 largest banks total leverage

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<thead>
<tr>
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</tr>
</thead>
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<td>Industrial &amp; Commercial Bank of China Ltd</td>
<td>17.1</td>
<td>16.1</td>
<td>16.2</td>
<td>17.5</td>
<td>16.4</td>
<td>16.2</td>
<td>15.6</td>
<td>14.8</td>
<td>14.1</td>
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<td>HSBC Holdings PLC</td>
<td>20.1</td>
<td>23.0</td>
<td>27.0</td>
<td>18.8</td>
<td>16.9</td>
<td>16.4</td>
<td>15.6</td>
<td>14.9</td>
<td>14.1</td>
</tr>
<tr>
<td>China Construction Bank Group</td>
<td>15.5</td>
<td>15.3</td>
<td>16.2</td>
<td>17.3</td>
<td>15.5</td>
<td>15.1</td>
<td>14.8</td>
<td>14.4</td>
<td>14.0</td>
</tr>
<tr>
<td>BNP Paribas SA</td>
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<td>45.2</td>
<td>48.6</td>
<td>33.5</td>
<td>30.0</td>
<td>28.9</td>
<td>24.4</td>
<td>22.2</td>
<td>23.6</td>
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<td>(30.7)</td>
<td>135.8</td>
<td>24.2</td>
<td>25.9</td>
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<td>18.0</td>
<td>17.7</td>
<td>17.3</td>
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<td>14.0</td>
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<td>16.1</td>
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<td>12.1</td>
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<td>15.0</td>
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<td>16.3</td>
<td>15.4</td>
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<td>Mitsubishi UFJ Financial Group Inc</td>
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<td>29.2</td>
<td>24.3</td>
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<td>23.1</td>
<td>22.1</td>
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Source: Aon Benfield Analytics
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