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& POOR'S**

# Global Reinsurance Highlights

2007 Edition



**New Dawn Or False Dawn?**



A Reactions publication

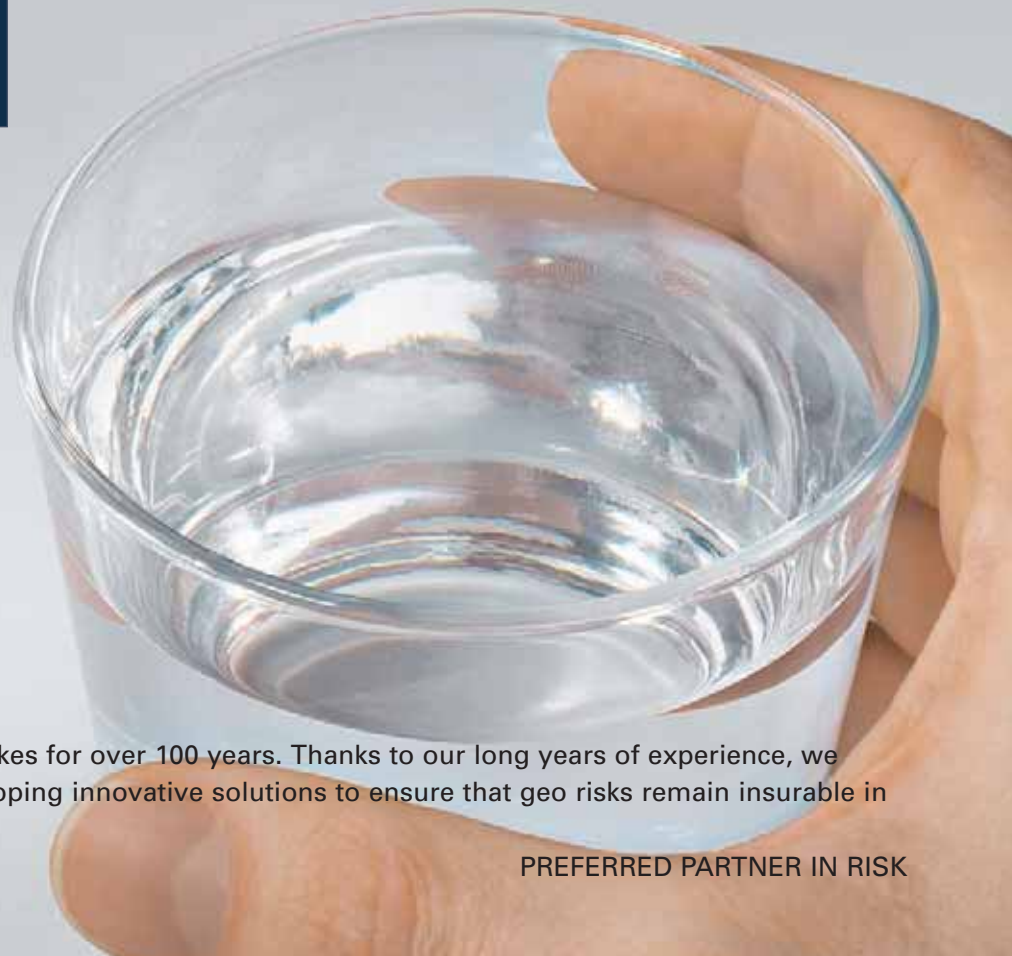
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# Global Reinsurance Highlights

## *2007 Edition*



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# Global Reinsurance Highlights

## *2007 Edition*

- 5 Foreword**
- 6 Global Overview**  
Global Reinsurance: A New Dawn Or Another False Dawn For The Sector?
- 12 Enterprise Risk Management**  
Global Reinsurers' Complex Risk Profiles Demand Sophisticated Enterprise Risk Management
- 16 Capital Adequacy**  
(Re)Insurer Capital Analysis: What Does The Future Hold?
- 20 Diversification**  
Reinsurer Diversification: A Means To An End, Not An End In Itself
- 24 Top 40 Global Reinsurance Groups**
- 26 Global Reinsurer List By Country**
- 45 Regulation**  
Insurance Regulation In The Midst Of A Global Revolution
- 47 Solvency II**  
Solvency II: A Short Reprieve, But Europe's Insurers Should Ignore It At Their Peril
- 50 Legislative Change**  
Private Reinsurers Find Business Opportunities Amid The Legislative Changes In Florida
- 52 Start-Ups**  
Bermuda Class Of 2001: Five Years On
- 55 Life Reinsurance**  
Life Reinsurers May Feel The Squeeze As Cessions Shrink
- 57 Asia-Pacific**  
Asia-Pacific Reinsurance Markets Remain Stable Despite Softening
- 60 Latin America**  
Reinsurance In Latin America, Especially Brazil, Shows Growth Potential

# New Dawn Or False Dawn?

The (re)insurance industry is at a crucial point in its history. Its record of long-term profitability lags that of the banking sector and has been prone to much greater volatility. Furthermore, it is both poorly regarded and poorly understood relative to other sectors by investors. Opaque financial reporting, poor risk management, limited capital market disciplines, and regulation unresponsive to risk have been synonymous with its history. Over the past five years, however, the seismic shift in transparency, the intensifying focus on risk management, and the rapidly emerging insurance-linked securities market have changed the global insurance landscape, and a revolution in insurance regulation in Europe is under way. Many of the leading reinsurers have been at the forefront of, and will benefit from, these developments. Together, these changes have created an opportunity for the industry to enjoy an era of higher earnings together with lower volatility.

Will the opportunity be seized? We are cautiously optimistic that it will, and this is reflected in our current ratings. Our lead article, "Global Reinsurance: A New Dawn Or Another False Dawn For The Sector?", analyzes the arguments for both. The upcoming renewal may begin to provide us with the evidence.

The life reinsurance sector continues to enjoy the earnings and stability that the non-life sector craves. "Life Reinsurers May Feel The Squeeze As Cessions Shrink" looks at the challenges it faces as volumes drop in developed markets.

The industry is relearning risk management. Our analysis of enterprise risk management (ERM) is nearing the end of its second year, and we view it as a vital component of reinsurer ratings. Reinsurers are some of the leading exponents of ERM. "Global Reinsurers' Complex Risk Profiles Demand Sophisticated Enterprise Risk Management" identifies the leaders in ERM practices among reinsurers and puts this into context within the insurance industry as a whole.

We introduced our updated risk-based capital adequacy model in May this year. "(Re)Insurer Capital Analysis: What Does The Future Hold?" examines the changes to, and impact of, the new model, as well as the expected future impact of internal economic capital models (ECMs) on our analysis. By the end of this year, we expect to have our criteria for ECM analysis in place. Our views of capital adequacy of (re)insurers with excellent or strong ERM assessments will be significantly influenced by ECM analysis, which we will implement from 2008.

Typically, the results of our model and the results of an insurer's ECM differ, mainly due to the level of diversification benefits. "Reinsurer Diversification: A Means To An End, Not An End In Itself" casts a skeptical eye over the benefits of diversification.

Insurance-related regulatory and political activity is frantic. The long-awaited EU Solvency II Directive proposal has recently been published, as has the IASB's discussion paper for the IFRS Phase II standard for insurance. "Insurance Regulation In The Midst Of A Global Revolution" plots a path of converging, principles-based, risk-sensitive approaches around the globe. "Solvency II: A Short Reprieve, But Europe's Insurers Should Ignore It At Their Peril" examines the preparedness of the industry for a revolution in insurance regulation in Europe. Both Solvency II and IFRS will be highly political over the next five years. "Private Reinsurers Find Business Opportunities Amid The Legislative Changes In Florida" assesses the impact on the industry of the Sunshine State's natural catastrophe politics.

The aftermath of hurricanes Katrina, Rita, and Wilma in 2005 saw the creation of the Class of 2005 reinsurers, but they face greater challenges than their elders in the Class of 2001, many of whom have graduated with distinction. "Bermuda Class Of 2001: Five Years On" tracks the progress of this group and envisions the path to graduation of their 2005 classmates.

Finally, "Asia-Pacific Reinsurance Markets Remain Stable Despite Softening" and "Reinsurance In Latin America, Especially Brazil, Shows Growth Potential" provide regional perspectives on change within the industry.

We think that *Global Reinsurance Highlights* captures the key issues facing reinsurer management. We hope that you enjoy the 2007 edition, and would welcome your feedback on possible enhancements for future years.

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# Global Reinsurance: A New Dawn Or Another False Dawn For The Sector?

**The reinsurance sector is at a critical juncture as the forthcoming renewal season approaches. If it maintains discipline, a new era of cross-cycle earnings adequacy could be dawning. But if history is allowed to repeat itself and irrational pricing re-emerges, another opportunity to tame the cycle will have been lost.**

The forthcoming renewal season is shaping up to be the most symbolic faced by reinsurers since 2002 (assuming there is no market-changing loss event before the end of the year). How the sector behaves will be critical to its prospects for long-term success. A more disciplined approach than seen in the past, underpinned by the sector's enhanced enterprise risk management (ERM) credentials, could herald an era of cross-cycle earnings at or above the level of the industry's cost of capital. Conversely, poor discipline and a perpetuation of the extreme pricing cycles that have characterized the sector historically would be harmful to the industry's reputation, prospective financial flexibility, and ratings.

Standard & Poor's Ratings Services remains cautiously optimistic that the industry has not only learned the lessons of its past errors, but has now armed itself with the tools necessary to enable it, at the very least, to avoid repeating the most egregious of those mistakes. The industry's willingness and ability to fully and effectively deploy its newly acquired armor in the heat of battle will determine whether the reinsurance sector is awaiting the arrival of a new dawn or facing yet another false one.

As a result of this cautious optimism, Standard & Poor's is maintaining its stable outlook on the global reinsurance sector. We expect that the number of reinsurer ratings downgrades and upgrades will be nearly equal through the remainder of 2007 and into 2008. Furthermore, we do not expect a large number of ratings changes during this period, as the vast majority of rated reinsurers currently enjoy a stable outlook. Clear evidence of a new dawn would likely place some upward pressure on reinsurer ratings, though it is our expectation that this pressure would be fairly limited overall because an improvement in cross-cycle earnings is already built into our appraisal of the sector. Consequently, emerging evidence of yet another false dawn would place downward pressure on our existing ratings.

Despite the industry's below-par earnings track record in absolute terms—and particularly on a risk-adjusted basis—the sector continues to be highly rated, with 80% of reinsurers being rated 'A-' or higher. This distribution is artificially skewed to some extent by the fact that many reinsurers, particularly those operating in highly credit-sensitive jurisdictions and/or business lines, are generally reluctant to accept ratings assigned



to them that are below the 'A-' level, regardless of the rating agency involved. Nevertheless, the industry's ratings profile, despite the compression seen since 2001, remains strong overall. The new dawn scenario would see this maintained; the false dawn may not.

Our decision to maintain the stable outlook on the sector reflects the following positive factors:

- Continued strong, though declining, underlying earnings,
- Improving ERM credentials,
- Strong, and improving, capitalization, and
- Strong financial flexibility.

These strengths are partially offset by the following weaknesses:

- Effectiveness of ERM is yet to be tested by market conditions,
- Declining price adequacy,
- Continued low barriers to entry, and
- Potential increase in the frequency and severity of natural catastrophes.

### 2006 In Review

#### Earnings reflect the perfect calm

The industry generated very strong earnings in 2006, providing a marked contrast to the prior year, when the unprecedented frequency and severity of natural catastrophes took its toll. The top 10 groups posted an average non-life combined ratio of 89.8% against the five-year average of 99.2%, and an ROR of 15.1% against the five-year average of 5.8%.

The sector's performance was propelled by three main factors. First, in direct contrast to the previous year, the loss experience for 2006 was unusually benign, the perfect calm followed the perfect storm. Swiss Re estimates that 2006 produced the third-lowest level of insured losses in the past 20 years<sup>1</sup>.

Second, the pricing environment continued to be favorable across most regions and business lines. Pricing for catastrophe-exposed U.S. lines of business spiked following the record losses attributable to hurricanes Katrina, Rita, and Wilma in 2005, and peaked at the July 1, 2006, renewal. This, in combination with the benign loss environment, was particularly favorable for Bermudian (re)insurers, who posted an exceptional average combined ratio of 72%<sup>2</sup>—their best ever—versus 2005's 139%.

The third factor was a marked reduction in the earnings drag caused by deficiencies in prior-year loss reserves, particularly in U.S. casualty lines written between 1997 and 2001, as has already been well documented. In each year between 2001 and 2005, the annual adverse development on the reserves held by the top 20 U.S. reinsurers exceeded \$3 billion, totaling \$22.8 billion overall. This represents a staggering 62% of the casualty reserves held by the affected reinsurers for the financial year ended Dec. 31, 2000. U.S. reinsurers continued to report adverse development during 2006, but at a much-reduced level: \$1.1 billion in 2006, well below the average of \$4.5 billion reported over the five preceding years.

Outside the U.S., the reversal of the recent trend of

**Table 1:**  
**A New Dawn For The Reinsurance Sector? The Arguments For And Against**

New Dawn	False Dawn
Enhanced discipline enforced by an increasingly sophisticated investor base	Barriers to entry remain low
Robust, and improving, ERM credentials	Most ERM frameworks are immature and untested
Constraints on traditional retrocession capacity decline, but persist	Alternative sources of capacity gain momentum, and primary writers retain more risk
Allegiance pledged to the technical price	The technical price is only as robust as the assumptions that underpin it
Improved transparency of price adequacy/rate trends, both internally and externally	Continued opacity surrounding trends in claims inflation
More proactive capital management expected to reinforce underwriting discipline	External factors continue to constrain reinsurers' ability to optimize their economic capital
Investment yields remain insufficient to subsidize poor underwriting	Bond yields have been on an upward trajectory, and equity markets were recently at record highs
More highly rated reinsurers begin to be compensated for the relative financial strength they offer cedants	Significant cultural and structural impediments remain to the widespread differentiation of the terms and conditions obtained by reinsurers

1. Source: Swiss Re Sigma No. 2/2007, "Natural catastrophes and man-made disasters in 2006: low insured losses".  
2. Source: Deloitte Bermuda Insurance Survey 2007.

## Global Overview

high adverse development was even more pronounced. Many reinsurers reported overall releases on their prior-year reserves, reflecting a partial unwind of the conservatism that had been built into the loss reserves established at the beginning of the current hard cycle, particularly in the 2002-2004 underwriting years. The 2006 accident year also allowed many reinsurers to post conservative loss reserves, which can be released to bolster lower underlying performance in later years.

### Capital-markets-based solutions gain further momentum and critical mass

The reduction in the availability of traditional retrocession and, to a lesser extent, reinsurance capacity following the extreme 2005 hurricane season gave rise to a step change during 2006 in the industry's use of nontraditional forms of capacity in general and capital-markets-based solutions in particular. Insurance-linked securities (ILS), most notably catastrophe bonds, collateralized quota-share agreements, industry loss warranties, and sidecars, have become increasingly prevalent over the past 18 months.

In 2006, Standard & Poor's rated \$4.1 billion of natural peril catastrophe bonds, up from \$1.3 billion in 2005. Perhaps more significantly, the momentum built during 2006 has been carried into 2007, with the volume of rated new issuance during the first half of the year already totaling \$3.2 billion. However, even the increased volume of ILS issuance has been insufficient to satisfy investor demand, which continues to be fuelled by the ongoing pursuit of both noncorrelating asset classes and enhanced yield.

In addition, there is increasing interest in the application of securitization technology to a broader range of insurance-related risks. In a non-life context, this is evidenced by AXA's recent completion of its second motor policies insurance securitization. In

the life segment, there is a growing level of interest surrounding the potential for longevity risk to be repackaged and sold to investors. This is in addition to the extreme-mortality-risk products already on the market.

The step change seen in the use of capital-markets-based solutions over the past 18 months and the exponential rates of future growth being forecast represent both an opportunity and a threat to traditional reinsurers.

Opportunities include access to a broader and deeper market for ILS. This has led to enhanced financial flexibility (that is, the industry's level of access to funding relative to its needs), partially alleviating the capacity shortage arising as a consequence of the withdrawal of traditional retrocession capacity. Further, from a risk management standpoint, the growth of capital-markets-based solutions enables reinsurers to manage their peak exposures without assuming material amounts of incremental counterparty credit risk.

A deeper market also enhances the transparency surrounding the pricing of catastrophe risk. This could be a double-edged sword for the industry, however, as transparency is likely to constrain the level and duration of irrational spikes in pricing levels following a major event. This effect will be exacerbated by the fluidity of the capacity offered by nontraditional structures, which should bring supply and demand back into equilibrium more quickly following large events in the future. In its favor, improved transparency surrounding the pricing of catastrophe risk should constrain underpricing as the market softens. The combined effect should be to reduce the level of earnings volatility associated with catastrophe-affected lines, which in turn should lower the industry's cost of capital.

Less earnings volatility should also be a feature for those players whose business model is geared to the growth of capital-markets solutions, via their advisory capabilities, for example. The future earnings quality for those companies is likely to benefit as fee-based advisory income replaces more volatile margins on traditional reinsurance premiums.

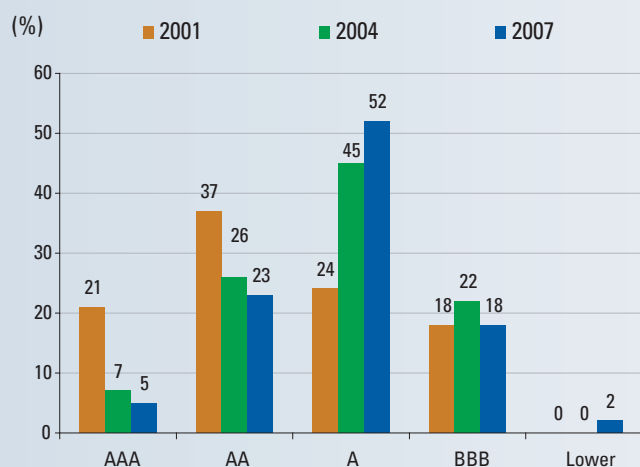
As the level of issuer and investor familiarity with ILS increases and the associated frictional costs decline, we expect to see an increasing number of primary insurers, and for that matter more industrials, looking to enter as sponsors what has until now largely been the domain of reinsurers. The recent landmark issuance by State Farm Mutual Automobile Insurance Co. (via Merna Re Ltd.) of a \$1.2 billion multiperil catastrophe bond, the largest ever issuance of its type, is an example of what we believe is an emerging trend.

For the reinsurers, there is some danger in this, however. In fact, the use of capital-markets solutions as a substitute for traditional reinsurance arguably represents as much (if not more) of a threat as it does an opportunity for the sector.

### ERM to the fore

The reinsurance sector has embraced the concept of ERM. More than 40% of the reinsurers whose ERM

**Chart 1:**  
**Ratings Profile At June 30: 2001 Vs. 2004 Vs. 2007**



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capabilities have been assessed by Standard & Poor's to date were evaluated to be either strong or excellent. This compares with the global average for the (re)insurance sector of 13% for such results.

ERM is highly important in Standard & Poor's ratings on reinsurers. This reflects the inherently risky nature of their business, the complexity of the business models employed—particularly by the larger, more traditional players, the industry's marginal historical earnings track record, and the sheer magnitude of the downside risk faced by reinsurers, both in absolute terms and relative to other industries.

While most reinsurers have invested significant resources and made substantial progress in building their ERM credentials in the past 12 months, a robust framework can take a number of years to mature, and for the majority, the efficacy of their enhancements to ERM is yet to be tested. Nevertheless, underpinning the profile of Standard & Poor's ratings on the sector, which in spite of the compression seen since 2001 remain higher than the industry's unenviable earnings track record would imply, is a belief that the level of commitment being shown to ERM will instill a greater level of underwriting discipline in the future than has been witnessed in the past. We believe that this is an absolute necessity for the sector.

## 2007 And Beyond

### Pricing adequacy and ERM: walking the walk

The general consensus among the reinsurance community at present is that, while pricing levels remain (almost universally) under pressure, with the odd exception they have not yet declined to a point that would test the technical price (see sidebar, "What Is

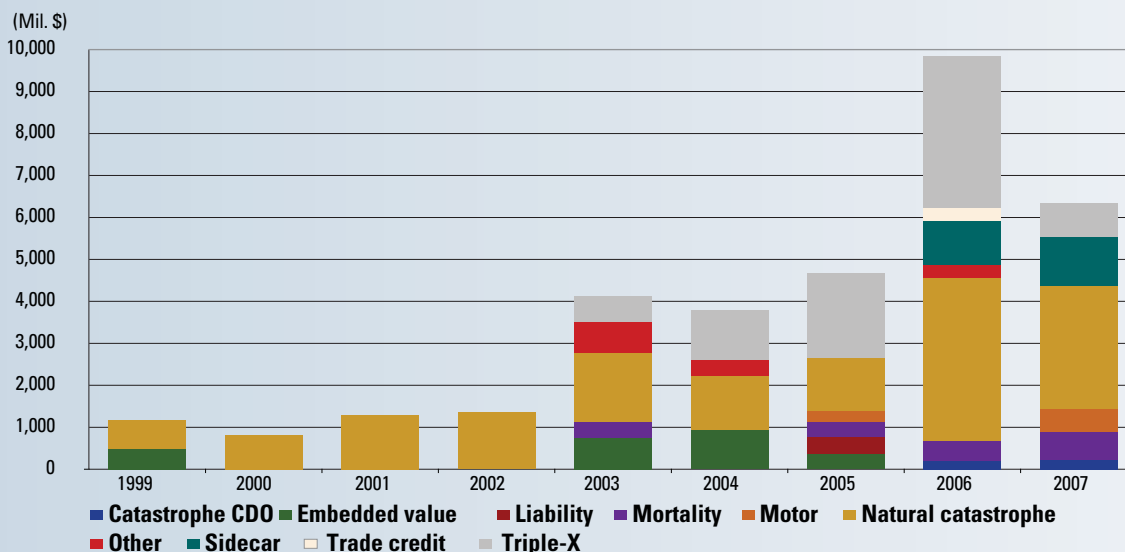
Meant By The Technical Price?"). However, most agree that, absent a market-changing loss event in the intervening period, technical pricing levels for most lines of business in most territories will be tested at the forthcoming January 2008 renewal. Prior to hurricanes Katrina, Rita and Wilma (KRW), the 2006 renewal would have been symbolic, but KRW deferred this examination of resolve for two years.

It is easy for management to pledge allegiance to the technical price in a hard market, but far more challenging for it to shed underpriced risks and preside over a shrinking top line in a soft market. Consequently, over the coming months, we will be looking for any signs that the reinsurers we rate might be unwilling to "walk the walk." These could include:

- A failure to translate managements' intent into underwriter behavior,
- Aggressive targets for organic growth, both in absolute terms and relative to peers,
- Tweaking the pricing methodology to enhance competitiveness,
- A disconnect between medium-term business plans and capital management initiatives,
- A proliferation of multiyear deals, especially those without repricing clauses,
- A spike in new business as a proportion of the portfolio underwritten,
- Weaker conditions such as lower deductibles and extended coverage,
- Inappropriate or poorly executed acquisitions, and
- An increase in the amount of diversification credit assumed as part of the technical price.

Chart 2:

### Insurance-Linked Securities Come Of Age: New Issuance Rated By Standard & Poor's



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### Proactive capital management: a vital link in the virtuous circle

Capital management in general, and the repatriation of surplus capital in particular, have already emerged as themes for 2007, and Standard & Poor's predicts that further momentum will build in this area toward the end of the year, assuming the strong level of earnings currently predicted is achieved.

The increased willingness of reinsurers to return capital to their shareholders provides, in many cases, tangible evidence of their commitment to be more proactive in their response to softening market conditions than has been evident in the past. Consequently, proactive capital management, in the context of a robust ERM framework, will be viewed positively by Standard & Poor's when it can be expected to reinforce underwriting discipline. Such discipline enhances the likelihood an entity will achieve its targeted cross-cycle rate of return, which should, in turn, boost its future financial flexibility—a factor critical to the success (and indeed, at times, survival) of many reinsurers over time.

In the past, the industry has tended to hoard its hard-earned capital. The understandable pressure from shareholders for companies to generate an acceptable return on their often bloated capital base meant that even the more disciplined of underwriters had to find alternative ways to put their balance sheets to work. Many chose either higher risk investment strategies or the pursuit of inorganic growth

### What Is Meant By The Technical Price?

In layman's terms, the technical price refers to the level of premium necessary to enable the reinsurer to pay its claims, remunerate its intermediaries, cover its other expenses, and earn its cost of capital. All other things being equal, if a reinsurer continues to underwrite risks for a premium below the technical price it is likely to be destroying shareholder value. Underwriting a lot of business below the technical price for an extended period can threaten an entity's long-term viability.

Reinsurers' ability to establish a technical price has improved over time. Most recently, economic models are allowing them to allocate the "right" amount of capital to individual contracts. The amount is based on the volatility around expected claims under the contract, often adjusted for the computed diversification benefit derived from the portfolio as a whole. Reinsurers that focus on large, discrete transactions aspire to marginal pricing, meaning that each transaction is priced based on the effect it has on the reinsurance portfolio as a whole.

The technical price is easy to define, but hard to quantify. The estimation of some of its component parts is highly subjective (for example, future claim costs), and other parts will vary for different reinsurers underwriting the same underlying risk (for example, claim costs, overhead, cost of capital). Each company will have its own technical price for a given risk, and the presumption of there being a universal technical price is merely a convenient oversimplification.

through M&A, often with disastrous consequences. The seemingly less disciplined simply chose instead to maintain volumes and underprice business, thereby deploying their capital to their cedants instead!

The quid pro quo for the industry's more proactive stance on capital management is that investors will be willing to hand it back in a timely manner, should the need arise. As a natural extension of this virtuous circle of robust ERM, enhanced underwriting discipline, and proactive capital management, Standard & Poor's expects the capital markets to be more discerning in the future when making capital available to the reinsurance sector, selecting against those reinsurers that have failed to demonstrate a track record of underwriting discipline and/or those that incur losses beyond their stated risk tolerance.

### A further round of consolidation?

Rather than returning capital to shareholders, M&A represents a viable alternative to those reinsurers eager to deploy their surplus capital. However, despite all the headlines that have been written in recent months concerning the impending wave of M&A activity in the reinsurance sector, at the time of writing only three substantial transactions had been announced during 2007. Those are SCOR's acquisition of Converium and two transactions involving Class of 2005 Bermudians seeking diversity via Lloyd's: Validus' acquisition of Talbot Underwriting and Ariel Re's recommended offer for Atrium Underwriting.

We expect to see some further M&A activity in the sector, particularly in the first half of 2008, as reinsurers' capital management plans crystallize further, but widespread activity is not anticipated, for the following reasons:

- The industry has a poor acquisition track record. Poorly executed and ultimately unsuccessful acquisitions in the reinsurance sector far outnumber those that have been a success. The industry's poor track record is attributable to a number of factors, not least management hubris. Other reasons include heightened execution risk owing to the potential for adverse development on legacy reserves and the threat posed by disaffected underwriters leaving the company and taking their key relationships with them. The industry's poor track record is expected to act as a deterrent to the executive teams at many entities that might otherwise fit the profile of a would-be acquirer.
- Breadth and scale of capital repatriation initiatives are likely a signal of limited appetite for M&A. A number of prominent reinsurers have recently embarked on significant share buyback initiatives (see table 2). This willingness to return capital could be interpreted as a signal that these entities are less likely to instigate M&A activity over the near term.
- There is little incentive for Class of 2001 Bermudians to participate. The Class of 2001 Bermudians, looking



to consolidate their migration from start-ups to established players, might also be seen as natural consolidators as the industry enters a more challenging phase of the cycle. However, the unique underwriting opportunity that was presented to these companies in the wake of Sept. 11, 2001, meant that they were able to build both scale and diversity quickly via organic growth during a hard phase of the cycle. Hence, other than for tactical reasons, we believe there to be little incentive for these companies to participate in M&A over the near term.

Nevertheless, the unique set of circumstances confronting the Class of 2005 Bermudians suggests that they are likely to instigate more M&A activity over the coming months, with midsize Lloyd's businesses continuing to be the most likely targets. The Class of 2005 are capital rich, but generally lack scale and diversity. Further, the implicit requirement for them to maintain a *de minimus* level of capital above US\$0.5 billion constrains the capital management options available to them relative to their more established peers.

As demonstrated by the two transactions announced to date, Lloyd's provides a natural strategic fit for the new Bermudians, but in Standard & Poor's view these transactions carry heightened execution risk. Past experience has demonstrated that cultural factors make the successful integration of a Lloyd's business even more challenging than would otherwise be the case. In addition, a combination of strong recent earnings and the positive momentum that continues to build at Lloyd's means that many

of the more attractive franchises are trading at steep multiples. This heightens the financial execution risk an acquisition at Lloyd's would pose to one of the new Bermudians, many of whom are currently trading at a level close to their book value.

### Conclusion

The year 2008 has the potential to represent a watershed for the reinsurance industry. Standard & Poor's remains cautiously optimistic that enhanced levels of underwriting discipline, underpinned by robust ERM and reinforced by proactive capital management, could herald a new dawn of cross-cycle earnings adequacy for the sector.

However, ratings would come under pressure should evidence emerge to suggest that, rather than witnessing the arrival of a new dawn, the reinsurance industry is on the cusp of yet another false one.

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**Table 2:  
Giving Something Back: Share Buyback Programs Initiated By Reinsurers In 2007**

Company	Shareholders' Equity At Dec. 31, 2006 (Mil. \$)	Date Announced	Authorized Buyback (Mil. \$)	Buyback As % Of Shareholders' Equity At Dec. 31, 2006
Endurance Specialty Holdings Ltd.	2,098	May 9, 2007	676	32
Munich Re	34,230	May 4, 2007	10,554	31
Arch Capital Group Ltd.	3,266	March 1, 2007	1,000	31
Swiss Re	25,335	March 1, 2007	4,922	19
Platinum Underwriters Holdings Ltd.	1,858	July 26, 2007	250	13
IPC Holdings Ltd.	1,755	April 24, 2007	200	11
PartnerRe Ltd.	3,266	May 11, 2007	366	11
XL Capital Ltd.	10,131	Feb. 26, 2007	1,000	10
Odyssey Re Holdings Corp.	2,084	June 15, 2007	200	10
Montpelier Re Holdings Ltd.	1,493	July 26, 2007	100	7
Max Capital Group Ltd.	1,390	July 30, 2007	100	7
<b>Total</b>	<b>86,906</b>		<b>19,368</b>	<b>22</b>

# Global Reinsurers' Complex Risk Profiles Demand Sophisticated Enterprise Risk Management

**Enterprise risk management (ERM) should be one of the strongest lead indicators of a reinsurer's ability to deliver an appropriate cross-cycle risk-adjusted rate of return. Many reinsurers are now working on enhancements to their ERM, which is expected to be a key driver for reinsurer ratings over the medium term.**

Standard & Poor's Ratings Services has been conducting its ERM assessments of insurers since the introduction of its ERM criteria in November 2005. Our ERM opinions on most of the rated reinsurance groups in reinsurance have been made public in those companies' individual analyses. This article compiles these opinions for the first time (see table 1) and explains our aggregate findings, analyzed by the various components of ERM.

Charts 1 and 2 show how the global reinsurance market compares with the insurance market as a whole.

## ERM And Its Growing Role In Reinsurer Performance And Ratings

ERM evaluation continues to play an increasing role in Standard & Poor's analyses of the capabilities of

reinsurers to manage the various risks to their balance sheets efficiently. The following are themes that underlie our global perspective on reinsurers' ERM:

- ERM enhancement. A significant number of firms currently viewed with adequate ERM are on track to migrate to the strong category in the near future. Likewise, some of the current strong ERM insurers are on track for excellent designations.
- Modeling improvement. Reinsurers continue to refine their insurance risk modeling proficiency related to catastrophe and noncatastrophe exposure management and pricing.
- Economic capital (EC). Reinsurers are increasingly relying on internal models for more effective capital

**Table 1:  
ERM Scorecard For Rated Global Reinsurers**

Excellent	Strong	Adequate	Weak
Manulife Financial Corp.	ACE Tempest Re Ltd.	Amlin Bermuda Ltd.	Caisse Centrale de Réassurance
PartnerRe	Arch Capital Group Ltd.	Allied World Assurance Co.	Odyssey Re
RenaissanceRe Holdings Ltd.	Aspen Insurance Holdings Ltd.	AXIS Capital Holdings Ltd.	
	Endurance Specialty Holdings Ltd.	Catlin Insurance Co. Ltd.	
	Hannover Re	Converium	
	General Re	Everest Re	
	Munich Re	Folksamerica Re Co.	
	National Indemnity Co.	Harbor Point Re Ltd.	
	Platinum Underwriters Holdings Ltd.	Lloyd's	
	Swiss Re	Max Capital Group Ltd.	
		Montpelier Re Ltd.	
		SCOR	
		Sirius International Insurance Corp.	
		Transatlantic Holdings Inc.	

allocation and to improve their understanding of risks inherent to their organization.

- Cycle management. ERM is expected to support improved cycle management as softening pricing, terms, and conditions continue for most lines of business. EC models are increasingly informing insurers' views of price adequacy.

### ERM impact on ratings

ERM is emerging as one of the strongest indicators of an entity's ability to deliver an appropriate cross-cycle risk-adjusted return, which is expected to be a key driver for reinsurer ratings over the medium term.

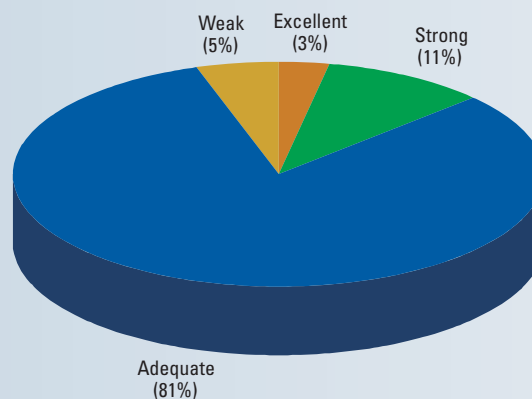
With 241 insurers and reinsurers assessed through 2006, only 14% had strong or excellent ERM, while 81% of the industry was viewed as adequate. Half of those viewed as strong or excellent were reinsurers or multiline writers with significant reinsurance operations (see charts 1 and 2). Some 60% of Bermudians that were assessed for ERM were either strong or excellent. These results suggest that reinsurers, and particularly the Bermudians, lead the overall industry in the sophistication and advancement of their ERM frameworks. Several firms are undergoing enhancements to their ERM processes, however, particularly in strategic risk management. It is our expectation that many insurers and reinsurers currently viewed as adequate are on track to migrate to the strong category as these enhancements are fully implemented and seasoned. Global reinsurers, such as Swiss Re and Munich Re, have invested in ERM over an extended period, typically longer than their Bermudian peers. Given the diversity of their risks and their global reach, they have the greatest need to do so, and attaining the highest ERM designation is more challenging as a result. The Bermudians typically have a narrower risk profile, and therefore the need to achieve high ERM designations is lower, but achieving higher designations is more straightforward.

Many reinsurers are developing or enhancing their insurance risk modeling capabilities, which should enhance their overall ERM framework. Despite the benign catastrophe experience and exceptional industrywide returns in 2006, threats of earnings volatility largely related to extreme events remain for much of the reinsurance sector. We feel that sound capital and exposure management related to catastrophic events is crucial for most reinsurers. In our view, most firms have enhanced their risk management capabilities in this area in the past 18 months, although the efficacy of these enhancements is unproven. These enhancements have taken many forms including a more critical evaluation of vendor model outputs, more clearly articulated catastrophe risk tolerance, enhanced emphasis on data quality, and general improvements in the underwriting process. That said, a small number of reinsurers are reluctant to embrace more sophisticated risk management processes beyond a traditional silo-based framework, which may create certain competitive dis-

advantages in the future for those firms. As an example, Standard & Poor's believes that an entity's future level of access to the capital markets after a large event could be constrained if its losses exceed its stated risk tolerance and/or are disproportionately large relative to peers.

EC modeling is becoming a more prominent tool to support the risk management process. This is particularly apparent with European and Bermudian reinsurers, where commercial and regulatory pressures (such as Solvency II) and growth in risk profile complexity will demand more sophisticated risk modeling capabilities. Incentives emerging under Solvency II to be regulated using internal models and in Standard & Poor's risk-based capital adequacy analysis (excellent and

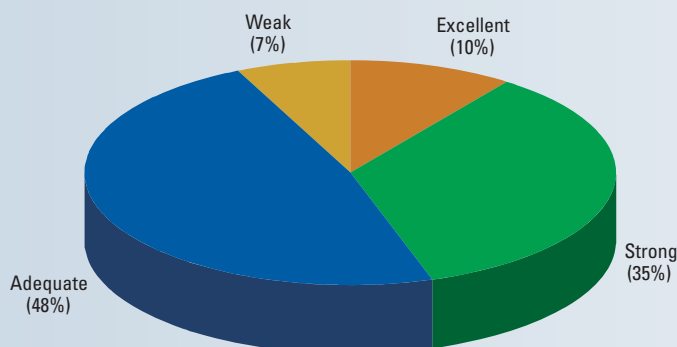
**Chart 1: All ERM Scores For 241 Global Insurers And Reinsurers**



Source: Standard & Poor's. As of December 2006.

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**Chart 2: ERM Scores For 29 Global Reinsurers**



Source: Standard & Poor's. As of July 2007.

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## Enterprise Risk Management

strong ERM insurers can expect to derive capital relief based on their internal models from 2008 onward) will drive more reinsurers to adopt EC models.

Competitive pricing and broadening terms are apparent for casualty and specialty lines, but property catastrophe is not immune to softening cycle conditions. Standard & Poor's feels some reinsurers have sound ERM frameworks to better understand the timing and effects of the changing cycle. This will make them better prepared for market downturns and resulting capacity management. Nevertheless, this will be closely scrutinized in the near term.

ERM has been a major factor for overall ratings for several reinsurers. Standard & Poor's expects this trend to continue. In the past six months, positive views on ERM were cited as contributing factors for favorable rating actions on Munich Re and Aspen Re,

while weaknesses in ERM were cited as key considerations for negative rating actions on Everest Re.

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**Table 2:  
Definitions Of Standard & Poor's ERM Classifications**

<b>Classification</b>	<b>Definition</b>
Excellent	Excellent ERM programs share all the criteria for programs considered strong but are more advanced in their development, implementation, and execution effectiveness. An excellent ERM insurer will have developed its process more fully over time, may have implemented it throughout a higher percentage of its group, or may be executing the process more effectively.
Strong	Strong ERM insurers have exceeded the adequate criteria for risk control and have a vision of their overall risk profile, an overall risk tolerance, a process for developing the risk limits from the overall risk tolerance that is tied to the risk-adjusted returns for the various alternatives, and a goal of optimizing risk-adjusted returns. In addition, strong programs have robust processes to identify and prepare for emerging risks. Standard & Poor's expects ERM to be a competitive advantage for these insurers over time. The process of selecting choices that have the best risk-adjusted returns should result in lower losses per unit of income over time, allowing these insurers to choose between offering lower prices, paying higher dividends, retaining higher capital, or obtaining capital at a lower net cost than competitors without the ERM advantage.
Adequate	Adequate insurer ERM programs have fully functioning risk control systems in place for all major risks. The risk management process is solid, classical, and silo-based, and most insurers fall into this category. However, these insurers often lack a clear vision of their overall risk profile and often lack overall risk tolerance. Risk limits for various risks have usually been set independently, and systems for each risk element usually function completely separately, without any significant coordination across silos of its risks. Adequate insurers also lack a robust process for identifying and preparing for emerging risks. Since neither a cross-risk view nor overall risk tolerance exists, no process to optimize risk-adjusted return is present either. Standard & Poor's does not expect these companies to experience any unusual losses outside of their separate risk tolerances unless a rapid, major change occurs in the environment related to one or more of their major risks. Insurers can also have adequate ERM if the insurer has developed a cross-risk view, and an overall risk tolerance uses risk-return considerations for its business decisions and has a process for envisioning the next important emerging risk but does not have fully developed controls. Adequate ERM should not be a negative factor in most insurer ratings.
Weak	Weak insurer ERM programs cannot consistently control all of an insurer's major risks. Control processes are incomplete for one or more major risks, and these insurers have limited ability to fully identify, measure, or manage major risk exposures.

Source: Standard & Poor's.



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**Joseph V. Taranto**

Chairman & Chief  
Executive Officer  
Everest Re Group Ltd.

# (Re)Insurer Capital Analysis: What Does The Future Hold?

**The latest version of Standard & Poor's Ratings Services' risk-based capital adequacy model is not expected to precipitate major rating actions, but the implementation of the economic capital model analysis in the next year could have a significant impact on Standard & Poor's view of reinsurers' capital requirements.**

Substantial changes in Standard & Poor's (re)insurer capital adequacy analysis have been implemented in 2007, and more are planned for 2008. We published criteria for our new risk-based capital adequacy model in May 2007<sup>1</sup> following a market consultation in late 2006<sup>2</sup>. This model is an integral, quantitative tool in analyzing the capital adequacy of life, non-life, health, and reinsurance companies worldwide. Currently, we are also considering the role that (re)insurers' own economic capital models (ECMs) may play in our future capital adequacy analysis<sup>3</sup>.

The most significant change resulting from the responses to Standard & Poor's risk-based capital adequacy model consultation was to incorporate diversification benefits into the model for the first time. The new model also includes significant revisions to the capital requirements for reinsurers' premium risk, reserve risk, and catastrophe risk. As far as ECMs are concerned, we are expecting to incorporate certain (re)insurers' internally modeled views of capital adequacy into our own analysis by blending their results with those of our own capital model. The responses to the consultation will assist us in designing the relevant criteria.

Some commentators are envisioning a large-scale return of capital to owners as a consequence of these changes and in conjunction with emerging regulatory incentives in Europe through Solvency II. This article explains Standard & Poor's perspective.

### **Risk-Based Capital Adequacy Model**

#### **New model not expected to have big impact on ratings**

The new model, which will be run in parallel with the current model until the end of this year, is not expected to lead to widespread rating actions. With all the charges having been reviewed and updated, however, there will be some impact to the model results on capital adequacy. The materiality of this will depend on

the risk profile of the insurer in question.

Areas that will see increased charges for insurers generally are long-tail liability reserves, equity holdings, large asset-liability duration mismatches, longevity exposures, and natural peril catastrophe risks (albeit that charges for the latter were introduced ahead of the new model). Areas that will see reduced charges are the lower risk exposures such as short-tail non-life reserves, short-term non-life bonds, and selected life and health reserves in certain markets.

Capital adequacy according to the new model will no longer be expressed as a capital adequacy ratio based on 'BBB' level capital requirements. Instead, it will be described in terms of adjusted capital being either redundant or deficient across targeted levels of risk-adjusted capital requirements consistent with the rating level (using confidence levels for establishing the degree of certainty for each individual risk of 97.2% for 'BBB', 99.4% for 'A', 99.7% for 'AA', and 99.9% for 'AAA' rating categories).

Nevertheless, the capital adequacy outcome from the model remains just a starting point for judging capitalization as a whole. Qualitative and quantitative enhancements will continue to be applied as warranted to derive a more complete picture of an insurer's capital position. Furthermore, capitalization is just one component of the overall analysis that determines the rating (see chart 1).

### **Explicit credit given for diversification**

Historically, Standard & Poor's has embedded credit for diversification implicitly within the rating process. In building up a financial strength rating opinion, the benefit of diversification has emerged through an assessment of factors such as competitive position and earnings. The updated model will now include an explicit allowance for diversification. This is in addition to the implicit diversification credit embedded in

1. See "New Risk-Based Insurance Capital Model," published May 31, 2007, on RatingsDirect and ClassicDirect.
2. See "Request For Comment: Revisions In The Risk-Based Insurance Capital Model," published Nov. 21, 2006, on RatingsDirect and ClassicDirect.
3. See "Request For Comment: Economic Capital Review Process For Insurers," published Feb. 5, 2007, on RatingsDirect and ClassicDirect.

many of the charges (for example, equity, mortality) where indices and industry-level data are being used.

Correlation matrices have been developed following analysis of Standard & Poor's, insurers', and industry-level data. The capital model will apply a standard approach to each company/group and not seek to actively differentiate the diversification by the quality of management or the underlying operations. Furthermore, the focus is more on spread of risk rather than absolute size. This more qualitative assessment is carried out elsewhere within the analysis, in particular through the enterprise risk management (ERM) process.

Capital relief is given across sectors and between product types (for non-life) and risk types (for life), as well as for investment risks. No explicit credit is currently given for the geographic spread of business (see table 1).

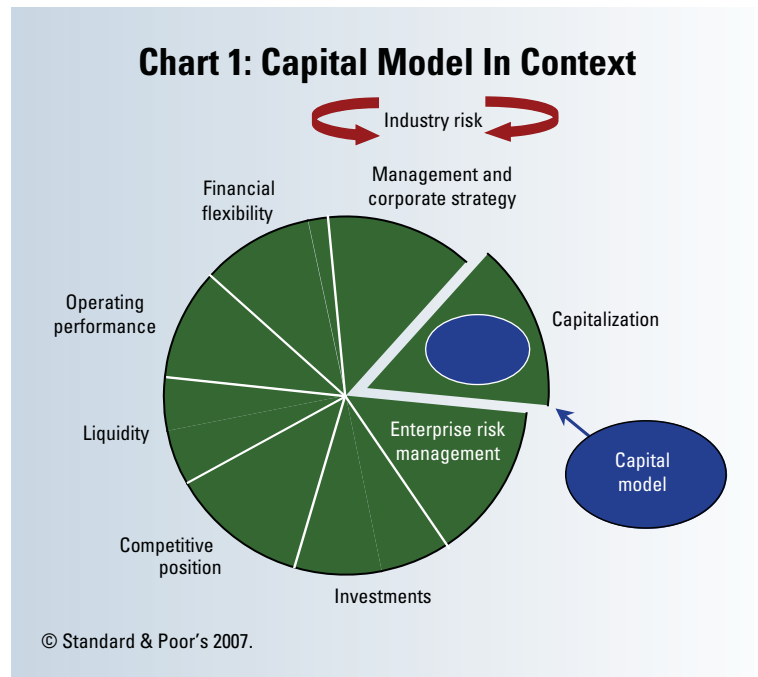
The credit given under the model for diversification is lower than that found in insurer and industry models (for example, the Committee of European Insurance and Occupational Pensions Supervisors' Quantitative Impact Study 3). This reflects a more conservative view on correlations in the tail. The conservatism in the diversification credit also reflects some implicit diversification in the chosen confidence intervals for each risk charge. To give some quantification to the potential diversification credit available under the updated model, we would expect that a well-diversified composite group could receive up to about 18% capital relief, with a life or non-life entity receiving up to about 10%.

#### Impact of property catastrophe risk charge for reinsurers reduced

One of the most significant changes for reinsurers is the revision to the property catastrophe charge. The charges were increased substantially in 2005 (prior to hurricanes Katrina, Rita, and Wilma) to an annual aggregate one-in-250-year probable maximum loss derived from property business (using the short-term catalogue of events where appropriate).

The changes incorporated in the new model are designed to soften the impact, partly because since 2005 the models on which the charges are typically based are substantially more robust and result in higher estimates compared with pre-2005 levels. The first change is that the charge will now be computed on an after-tax basis. Second, the charge will not be scaled up for higher target rating levels (that is, given its materiality, the one-in-250-year standard will be applied to all reinsurers). Since the entry point remains at the 'A-' level for rating-sensitive markets, most reinsurers will benefit from this change.

Reinsurers will also benefit indirectly since the new criteria apply equally to primary insurers. This could give rise to greater demand for more reinsurance protection.



#### Non-life premium and loss reserve charges repositioned

Reinsurers will also be affected by changes in the non-life premium and loss reserve charges. The overall impact of these changes is broadly neutral, although long-tail liability insurance classes will attract higher capital charges than before, and short-tail classes will be subject to lower charges. Changes in primary insurance charges may also affect reinsurance buyers' needs.

#### Economic Capital Model

##### Bigger impact expected once economic capital analysis is implemented

We anticipate a more significant impact when we implement ECM analysis over the next year. We introduced our ERM criteria in October 2005<sup>4</sup> with the longer term objective of developing criteria to analyze the ECMs used by insurers within their ERM processes to augment our view of their capital adequacy.

We have already determined that this analysis will only be undertaken for insurers with ERM programs that have been assessed by us as strong or excellent. Given our definition of strong or excellent ERM, these insurers use ECMs extensively within their business and specifically to optimize risk-adjusted returns. Once we have determined that these insurers have sufficiently robust ECMs, we then plan to subject those models to the analytical processes currently under development.

Having done so, we would expect to blend the results of insurers' ECMs and our own capital model

4. See "Insurance Criteria: Evaluating The Enterprise Risk Management Practices Of Insurance Companies," published Oct. 17, 2005, on RatingsDirect and ClassicDirect.

## Capital Adequacy

outcomes to form our view of capital adequacy. The “weighting” between the two inputs is still to be determined, but the ECM weighting will be significant. This will add to the regulatory incentives emerging in Europe (such as the U.K. Financial Services Authority’s Individual Capital Adequacy Standards, the Swiss Solvency Test, the EU’s Solvency II) and elsewhere for more insur-

ers to develop their own models. For insurers that do not, the updated capital adequacy model will be the sole quantitative tool used to inform Standard & Poor’s view of the capital adequacy of the insurer relative to its risks.

### What will this all mean for industry capital?

Many of the leading insurance groups claim that their

**Table 1:  
Correlation Matrices**

#### P/C Correlation Matrix

	Accident And Health	Motor	MAT	Property	Liability	Credit
Accident and health	1	0.5	0.5	0.25	0.5	0.75
Motor	0.5	1	0.75	0.75	0.5	0.5
MAT	0.5	0.75	1	0.75	0.75	0.5
Property	0.25	0.75	0.75	1	0.5	0.25
Liability	0.5	0.5	0.75	0.5	1	0.75
Credit	0.75	0.5	0.5	0.25	0.75	1

#### Life Correlation Matrix

	Mortality	Morbidity	Longevity	Other Life Risks		
Mortality	1	0.5	0.25	0.75		
Morbidity	0.5	1	0.25	0.75		
Longevity	0.25	0.25	1	0.75		
Other life risks	0.75	0.75	0.75	1		

#### Risk Type Correlation Matrix

	Life	P/C				
Life	1	0.25				
P/C	0.25	1				

#### Asset Risk Correlation Matrix

	Equities	Real Estate	Bonds			
Equities	1	0.75	0.75			
Real estate	0.75	1	0.75			
Bonds	0.75	0.75	1			

#### Diversification Haircut 50%

P/C—Property/casualty. MAT—Marine, aviation, and transport.



economic capital analysis suggests that they are substantially overcapitalized. They cite current regulatory and rating agency constraints that limit their capacity to return capital to owners.

Our responses to recent share buyback and special dividend activity, which is generally limited to returning periodic earnings, have been ratings neutral where these activities are carried out as part of a robust risk and capital management framework and reflect lower capital needs. Some insurers may wish to go further and realign their capital base to some degree to reflect the capital required as determined by their ECMs. We remain open-minded to this, given the provisos referred to above, but we do not expect to switch our attention exclusively to ECMs to inform our own view of capital adequacy in the short to medium term. Furthermore, we do not believe at this stage that any insurer is so comfortable with its ECM as to allow it to be the single arbiter of capital adequacy. Insurers' ERM as a whole, and ECMs in particular, are in their infancy and are largely untested by events. While insurers' ECMs reflect

the advances companies have made in managing their risks, we believe that, even in the hypothetical absence of regulatory and rating agency constraints, most insurer boards would be uncomfortable with not maintaining substantial margins over and above modeled outcomes. Their comfort levels with ECMs, and ours, will build over time.

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# Reinsurer Diversification: A Means To An End, Not An End In Itself

**D**iversification now receives explicit credit in Standard & Poor's Ratings Services' capital model. Nevertheless, the influence diversification has on the overall rating is unchanged. It continues to be considered an important driver of a reinsurer's financial strength, but not a goal to be pursued indiscriminately.

For reinsurers, diversification is often a useful byproduct of a well-constructed portfolio of risks built around a company's core competencies. Nevertheless, the pursuit of diversification as an end in itself is more likely to be detrimental than beneficial to an entity's long-term financial strength.

Diversification in the (re)insurance industry is nothing new. However, (re)insurers and their stakeholders have recently been focusing more heavily on

diversifying their portfolios for several reasons:

- The increased incidence of natural catastrophes,
- A growing body of evidence on the adverse effects of global warming,
- Improved sophistication of economic capital modeling, and
- Regulatory developments—most notably the ongoing development of Solvency II in Europe.

**Table 1:  
Selected Reinsurers' KRW Losses**

Company	Shareholders' Equity As Of June 30, 2005 (Mil. \$)	Estimated KRW Net Loss (Mil. \$)	KRW Loss As % Of Shareholders' Equity
PXRE Group	763	856	112.2
Montpelier Re	1,463	1,203	82.2
IPC Holdings	1,743	1,005	57.6
Platinum Re	1,273	530	41.6
Endurance	1,987	802	40.3
Aspen	1,608	595	36.9
AXIS	3,167	1,124	35.4
Everest Re	4,082	1,359	33.2
RenaissanceRe	2,823	892	31.5
Lloyd's	20,709	6,406	30.9
PartnerRe	3,482	900	25.8
Hannover Re	3,445	758	22.0
Arch Capital	2,503	381	15.2
Munich Re	26,608	2,605	9.7
Swiss Re	17,135	1,672	9.7

Source: Company reports.

**Table 2:  
Reinsurer Diversification Options**

Option	Description	Advantages	Disadvantages
Transformational acquisition	Merger with, or acquisition of, another entity having a complementary risk profile.	<p>Fastest way to achieve meaningful diversification.</p> <p>Potential to inherit an experienced underwriting team benefiting from an established competitive position.</p>	<p>Execution risk: the reinsurance sector has an unenviable track record when it comes to the successful integration of large-scale acquisitions.</p> <p>Risk of overpaying to cement a so-called strategic acquisition.</p> <p>Resultant financing strain could put pressure on capitalization, particularly for transactions that generate high goodwill.</p> <p>Potential inheritance of unforeseen legacy liabilities.</p>
Bolt-on acquisition	Acquisition either of an underwriting team or the renewal rights to an existing, complementary block of business.	<p>Facilitates a more tailored approach to the construction of the portfolio.</p> <p>Negligible exposure to legacy issues.</p> <p>Limited resultant capital strain.</p>	<p>Orphan portfolios could be of dubious quality.</p> <p>Potential legal and reputational risks associated with the active pursuit of an existing team at a competitor.</p>
Organic growth (geographic)	Gaining further leverage from an entity's existing underwriting expertise by extending the geographic reach.	<p>Execution risk is less pronounced.</p> <p>Could give rise to economies of scale.</p>	<p>The diversification effect is likely to be relatively modest.</p> <p>Some lines of business cannot be easily replicated in different territories.</p> <p>Possibility that growth can only be achieved by lowering underwriting standards or prices, especially in mature markets.</p>
Organic growth (business mix)	Pursuing organic growth within complementary lines of business.	<p>Limited resultant capital strain over the short term.</p> <p>Facilitates a more tailored approach to the construction of the portfolio.</p>	<p>Very difficult to build a competitive advantage in mature markets from a standing start.</p> <p>Limited underwriting expertise/track record increases the likelihood of adverse selection.</p>

## Diversification

### Diversification: What It Is And Why It's Important

It's sometimes easy to forget that the pooling and diversification of risk is the *raison d'être* for—and the key value proposition of—the (re)insurance industry. (Re)insurers diversify because a portfolio of insurance risks should have a more predictable return than would the individual risks—assuming the underlying risks are less than perfectly correlated. Correlation is the extent to which the returns on individual risks are expected to move in the same direction at the same time. For example, if two risks are perfectly correlated, their returns will move in lockstep. Conversely, the returns for risks that are negatively correlated will move in opposite directions.

The expected return on a portfolio of risks is the weighted average of the expected return on each risk. The expected volatility of the portfolio return will, more often than not, be something less than the sum of its parts. This is because of the benefits of diversification. Hence, the risk-adjusted return on a well-constructed, diverse portfolio of risk will—all other things being equal—be greater than the risk-adjusted return on a concentrated portfolio.

Although the optimization of the risk-adjusted return generated on the capital a reinsurer deploys is itself an important indicator of the company's financial strength, the impact diversification has on its ability to withstand a capital shock is arguably even more significant. The fallout from hurricanes Katrina, Rita, and Wilma (KRW) provides a case in point (see table 1).

Although it is by no means surprising that the so-called monoline property catastrophe writers had the largest relative exposure to the KRW events, the extent of the losses highlights their dependence on the capital markets for the preservation of their status as going concerns following a major event. In the past, the argument in favor of investors agreeing to recapitalize the incumbents has been compelling: it would enable the company—and, by extension, its investors—to take advantage of the spike in pricing that usually results from such events. However, the growth in the availability of temporary capacity for catastrophe risk made available via alternative structures, including sidecars, poses a dual challenge to the monoline business model. First, recapitalizations could be more challenging to execute as investors instead opt to direct their capital to alternative vehicles with a finite life and a predefined exit strategy. Second, following a major loss, the increased ease with which capital is now able to flow into the industry is likely to cap both the magnitude and duration of spikes in rates and the abnormal profits they generate.

Furthermore, although many of the more diversified players that also suffered large losses as a result of KRW have since proactively decreased their aggregate exposures to natural catastrophes and redeployed their capital into other lines of business, the strategic options available to the monoline writers are more limited.

### Diversification As A Means To An End

Table 2 provides a summary of the options that might be available to a reinsurer seeking to diversify its business as well as the relative advantages and disadvantages of each approach.

Irrespective of the approach adopted, it is imperative that the reinsurer does not blindly pursue diversification. Diversifying the top line is easy; successfully diversifying the bottom line is far more challenging. To do so, each business line must be able to generate an appropriate risk-adjusted return in its own right. Any incremental benefits attributable to the return on a given line of business being less than perfectly correlated with the existing portfolio are a bonus.

### How Does Standard & Poor's View Diversification In Its Analysis Of Reinsurers?

Effective diversification enhances our assessment of a reinsurer's financial strength. There is nothing new in this: diversification has always been an important factor when appraising the relative financial strength of reinsurers, and that will continue. Recent developments—specifically the downgrade of Bermudian monoline IPCRe and the quantification of a (limited) diversification credit within the updated risk-based capital model—have fueled the perception that Standard & Poor's is now placing more emphasis on diversification within its analysis. This is not the case. In fact, as outlined above, for Standard & Poor's to do so would likely encourage the pursuit of diversification as an end in itself, which could well prove detrimental to a reinsurer's credit standing over the long term. Moreover, our view of the effectiveness of a company's competitive position—whether concentrated or diverse—will be heavily influenced by a consideration of how successful it is in generating an appropriate risk-adjusted return over the longer term.

Nevertheless, several factors provide a welcome reminder of the benefits stemming from a well-diversified portfolio:

- The losses incurred in the wake of KRW relative to the overall portfolio,
- Evidence that we are in the midst of a heightened phase of natural catastrophe activity, and
- The potential constraints that the continued growth of alternative-capital-markets-based solutions place on the future restorative capital-raising initiatives of traditional companies.

As outlined below, diversification touches many facets of Standard & Poor's analysis of a reinsurer's financial strength:

#### Capitalization

Historically, Standard & Poor's has embedded credit for diversification implicitly within the rating process. In forming a financial strength rating opinion, the benefit of diversification has emerged through a qualitative

assessment of factors such as capitalization, competitive position, and earnings. For example, although a particular reinsurer's capital adequacy ratio might have been strong on a quantitative basis, we might have assessed its capitalization as a whole as very strong, partly because of our qualitative view of diversification.

However, Standard & Poor's updated risk-based capital model, the final version of which was released publicly in May 2007, includes an explicit quantitative allowance for diversification. For the time being, this credit will not likely exceed about 18% for reinsurers writing a diversified portfolio across both the non-life and life reinsurance segments. This is low relative to the diversification credit many reinsurers themselves attribute within their own economic capital models.

Standard & Poor's will calculate its diversification credit as a function of simple correlation matrices consistently across all (re)insurers (see *page 18*). However, it will remain at the discretion of the analyst to determine the extent to which this diversification credit will inform the rating committee's view of an entity's capital adequacy. So for example, for a company that embarks on a diversification strategy, it could take a number of years to obtain the full nominal diversification credit implied by the model.

We decided to give credit for the benefits of diversification within the model in response to market demands that we more closely align our view of economic capital with that of the companies themselves. However, the explicit diversification credit doesn't mean that we now consider diversification to be more significant to an entity's capital strength than we did in the past.

### Operating performance

Increasingly, Standard & Poor's is looking to focus its analytics on a reinsurer's risk-adjusted return on capital (RAROC). This is part of a broader project to enhance the quality and consistency of our analytics in this area. Diversification will form one of the key inputs to this process, in so far as the target rate of return for a well-diversified portfolio will be lower than that for a concentrated portfolio.

Diversification—and the impact it has on the relative volatility of earnings—is also an important input to our evaluation of earnings quality.

### Management and corporate strategy

For the previously mentioned reasons, we are likely to take a dim view of any management team that pursues diversification in the absence of a compelling, overarching strategic rationale for doing so.

### Enterprise risk management

The sophistication of the approach adopted by a (re)insurer in seeking to identify, measure, and harness the diversification benefits available within its defined strategy will be a potent indicator of robust strategic risk management. This is demonstrated by the way in which the awareness of specific diversification benefits

affects the entity's strategic decision-making processes and day-to-day operations. For example, although we would expect an entity to be able to quantify the incremental effect a proposed acquisition would have on the combined entity's risk-based capital requirements (including the effects of diversification), this shouldn't be the principal rationale in support of the transaction. As another example, we would look unfavorably on a company justifying its aggressive pricing by citing the enhanced diversification of its portfolio relative to those of its peers. In both situations, we would want to see how the (re)insurer has determined that there is truly an addition to returns that—in conjunction with the effect of the diversification—produces a superior RAROC.

### Financial flexibility

Diversification has both direct and indirect impacts on our assessment of financial flexibility, which is defined as the level of an entity's access to capital relative to its expected needs.

The direct effect is that the greater the diversity of the funding sources that are available to an entity, the better.

The indirect effect relates to our expectation that the capital markets will be more discerning in future when making capital available to the reinsurance sector. We believe that the capital markets should select against reinsurers that have failed to produce an adequate RAROC over time or incur losses beyond their stated risk tolerance.

### Conclusion

The recent spate of severe weather-related events has increased the visibility of diversification but not, in Standard & Poor's view, its relative importance. When not pursued aggressively as an end in itself, well-managed diversification has always been—and will remain—an important driver of a reinsurer's long-term financial strength.

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## Top 40 Global Reinsurance Groups

### Top 40 Global Reinsurance Groups Ranked By Net Reinsurance Premiums Written

Ranking	Company	Country	Net Reinsurance Premiums Written (Mil. \$)	
			2006	2005
1	Munich Re	Germany	25,432.7	22,602.8
2	Swiss Re (1)	Switzerland	23,841.1	20,558.4
3	Berkshire Hathaway Re	U.S.	11,576.0	10,041.0
4	Hannover Re	Germany	9,353.5	9,190.8
5	Lloyd's (2)	U.K.	8,445.3	6,566.8
6	SCOR (3)	France	4,885.2	2,691.8
7	Reinsurance Group of America Inc.	U.S.	4,343.0	3,863.0
8	Everest Re	Bermuda	3,875.7	3,972.0
9	PartnerRe	Bermuda	3,689.5	3,615.9
10	Transatlantic Holdings Inc.	U.S.	3,633.4	3,466.4
11	XL Re	Bermuda	2,959.7	5,012.9
12	Tokio Marine & Nichido Fire Insurance Co. Ltd.	Japan	2,783.4	2,789.3
13	Korean Re	Korea	2,349.5	1,946.7
14	Odyssey Re	U.S.	2,160.9	2,301.7
15	Converium	Switzerland	1,852.0	1,783.0
16	Scottish Re Group Ltd.	Bermuda	1,842.0	1,933.9
17	ACE Tempest Re	Bermuda	1,796.7	1,776.9
18	Sompo Japan Insurance Inc.	Japan	1,788.1	1,803.9
19	Mitsui Sumitomo Insurance Co. Ltd.	Japan	1,724.3	1,712.6
20	Caisse Centrale de Réassurance	France	1,508.7	1,475.5
21	AXIS Capital Holdings Ltd.	Bermuda	1,528.8	1,491.2
22	General Insurance Corp. of India	India	1,455.3	1,120.5
23	Arch Capital Group Ltd.	U.S.	1,365.4	1,657.5
24	Endurance Specialty Holdings Ltd.	Bermuda	1,327.9	1,322.9
25	Mapfre Re	Spain	1,299.2	1,081.9
26	White Mountains Re	Bermuda	1,290.0	1,304.3
27	Toa Re Co. Ltd.	Japan	1,286.3	1,210.6
28	PARIS RE (4)	Switzerland	1,254.0	1,362.4
29	QBE Insurance Group Ltd.	Australia	1,212.5	1,190.1
30	Platinum Underwriters Holdings Ltd.	Bermuda	1,176.6	1,717.7
31	Aioi Insurance Co. Ltd.	Japan	1,131.5	1,152.1
32	RenaissanceRe Holdings Ltd.	Bermuda	1,078.3	1,165.6
33	Aspen Insurance Holdings Ltd.	Bermuda	1,028.5	1,129.0
34	IRB-Brasil Resseguros S.A.	Brazil	910.3	650.3
35	WR Berkeley	U.S.	892.7	719.5
36	Deutsche Rück	Germany	878.5	697.4
37	NIPPONKOA	Japan	790.9	830.5
38	Transamerica Re (AEGON)	U.S.	770.6	726.9
39	Amlin Group	U.K.	737.9	526.0
40	Imagine Reinsurance Holdings Ltd.	Bermuda	655.8	516.4

1. On June 9, 2006, Swiss Re completed the acquisition of 100% of the outstanding common shares of GE Insurance Solutions Corp. (GEIS). Figures presented under Swiss Re are based on published year-end 2006 financial statements, and as such do not reflect GEIS' premium for the full year. The loss and expense ratios presented include nontraditional business. Excluding nontraditional, the loss and expense ratios for 2006 would be 64.1% and 26.3%, respectively.
2. Net premiums written and the combined ratio relate to reinsurance business only; all other items include direct business. Data are based on the published pro forma Lloyd's accounts, which represent an aggregation of all syndicates participating at Lloyd's. As such, some premium included for Lloyd's may also be included by other groups in this list that consolidate their Lloyd's operations.
3. During 2006, SCOR acquired the Revios group. Data presented for 2006 are based on a pro forma consolidation of SCOR and Revios.
4. During 2006, the renewal rights to the ongoing business of AXA Re were acquired by the newly formed PARIS RE. Numbers presented are based on pro forma financial statements for PARIS RE.

Pretax Operating Income (Mil. \$)		Expense Ratio (%)		Loss Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)		ROR (%)	
2006	2005	2006	2005	2006	2005	2006	2005	2006	2005
5,013.2	572.0	27.5	27.9	65.5	84.7	36,087.1	31,488.3	16.9	2.2
3,204.1	-695.3	31.5	30.1	63.6	85.5	26,273.7	19,863.8	10.2	-2.6
N.A.	N.A.	27.1	26.0	49.5	91.5	59,273.0	52,476.0	N.A.	N.A.
667.0	-152.4	27.5	26.8	73.7	85.6	6,309.6	5,340.9	6.4	-1.5
7,254.7	-378.5	33.2	31.5	47.6	103.6	25,134.1	18,048.7	25.7	-1.7
440.6	103.0	30.9	34.1	66.2	73.8	2,972.3	2,035.7	8.1	3.3
451.4	345.3	N.M.	N.M.	N.M.	N.M.	2,815.4	2,527.5	8.7	7.6
956.7	-371.2	26.5	26.2	63.2	94.0	5,107.7	4,139.7	21.3	-8.3
797.5	-235.0	29.5	29.0	55.1	87.0	3,785.8	3,092.8	19.4	-5.9
529.1	-86.0	27.5	27.2	68.3	85.0	2,958.3	2,544.0	13.1	-2.3
N.A.	N.A.	28.3	27.3	55.1	99.7	N.A.	N.A.	N.A.	N.A.
708.7	768.7	N.A. (5)	N.A.	N.A. (5)	N.A.	34,429.6	34,542.1	16.6	18.3
85.1	85.7	29.0	29.2	68.4	66.8	874.0	716.4	3.6	4.4
550.1	-241.7	27.7	27.1	66.7	90.5	2,083.6	1,639.5	20.3	-9.4
236.6	18.9	31.4	23.5	65.1	77.4	1,846.0	1,653.4	11.3	0.7
-147.5	113.6	N.M.	N.M.	N.M.	N.M.	1,057.2	1,271.7	-6.0	4.9
728.8	35.6	24.2	23.5	51.9	91.6	N.A.	N.A.	36.1	1.8
745.3	596.5	N.A. (5)	31.9	N.A. (5)	25.3	20,431.1	19,615.6	25.1	21.3
413.1	979.8	N.A. (5)	31.8	N.A. (5)	63.2	22,001.6	20,963.3	2.8	6.5
923.9	344.1	10.9	11.4	41.0	74.8	2,870.7	1,928.5	53.0	20.9
N.A.	N.A.	20.8	19.7	56.8	86.4	4,412.6	3,512.4	N.A.	N.A.
405.6	131.6	32.6	28.4	68.8	94.5	1,329.7	1,049.1	25.2	9.1
598.0	272.2	28.5	31.2	52.2	66.3	3,166.8	2,116.4	33.2	15.2
548.3	-263.4	34.0	31.3	49.1	96.8	2,297.9	1,872.5	32.7	-16.8
153.3	63.1	34.8	32.0	57.6	67.6	854.1	737.4	12.5	6.1
237.0	-93.6	30.8	28.2	71.3	90.2	2,378.5	1,971.3	15.5	-6.0
4.6	-127.4	N.A. (5)	28.9	N.A. (5)	90.4	2,583.0	2,309.4	0.3	-8.2
370.1	-183.6	30.7	32.7	45.3	90.9	2,175.1	1,323.4	26.0	-12.1
240.7	69.1	36.9	30.1	52.1	71.8	1,122.3	899.6	10.8	3.2
358.7	-159.4	32.4	27.5	64.6	87.6	1,858.1	1,540.2	23.6	-8.6
168.4	154.5	N.A. (5)	34.0	N.A. (5)	60.9	0.0	7,233.6	73.7	72.8
796.1	-274.5	36.2	31.6	41.4	159.6	2,480.5	1,753.8	57.2	-21.9
468.9	-156.0	29.9	27.2	48.3	100.8	2,389.3	2,039.8	24.9	-9.5
193.5	337.5	34.1	28.1	49.2	37.4	763.9	637.3	21.5	42.6
135.4	63.6	27.8	30.1	72.0	74.1	3,335.2	2,567.1	N.A.	N.A.
47.0	42.8	31.3	39.1	64.7	58.2	641.7	401.4	5.1	5.9
-164.4	155.8	N.A. (5)	36.7	N.A. (5)	63.1	8,479.6	8,858.0	-2.0	2.0
655.8	959.5	N.M.	N.M.	N.M.	N.M.	7,045.2	7,155.9	7.1	12.1
645.4	322.9	31.2	25.5	41.3	57.9	1,834.3	1,352.2	32.6	19.8
55.8	52.8	26.1	25.9	76.7	94.2	573.3	526.6	7.8	9.2

5. 2006 data unavailable at time of publication on a basis consistent with the prior year.

Net reinsurance premiums written = gross reinsurance premiums written less reinsurance premiums ceded; relate to a company's or group's reinsurance business only, unless where separately indicated.

Pretax operating income = underwriting profit (or loss) + net investment income + other income. Net realized gains/losses are excluded from this item.

Combined ratio = (net losses incurred + net underwriting expenses)/net premiums earned.

Total adjusted shareholders' funds = capital + shareholders' reserves (including claims-equalization reserve and any excess or deficiency of market value of investments over the balance sheet value).

ROR = pretax operating income/total revenue. (Total revenue = net premiums earned + net investment income + other income.)

N.A.—Not available. N.M.—Not meaningful.

## Global Reinsurer List By Country

To bring you the 2007 edition of *Global Reinsurance Highlights*, Standard & Poor's Ratings Services sought data on more than 250 reinsurance organizations from over 50 countries. To ensure consistency, Standard & Poor's obtained data from verifiable sources where possible, namely either published financial statements or regulatory returns. Hence, the data for U.S.-domiciled operating entities are principally based upon statutory returns, the data for U.K.-domiciled operating entities are derived from the Financial Services Authority returns, and, for other countries, companies' annual report and accounts have been used. Where it has not been possible to obtain the report and accounts, Standard & Poor's has surveyed each company or group.

Standard & Poor's has endeavored to collect the underlying data behind each group's or entity's combined ratio in order to calculate these ratios in a comparable manner. The combined ratios presented in *Global Reinsurance Highlights* have been calculated as: (net losses incurred + net underwriting expenses)/net

premiums earned. The combined ratio of any entity that writes purely life reinsurance has been marked as "N.M." (not meaningful), as Standard & Poor's does not consider this to be an accurate measure of a life reinsurer's profitability. For those groups or entities writing both non-life and life reinsurance business, the combined ratio reflects non-life business only.

One of the challenges has been to convince some companies to separate the reinsurance numbers from their primary insurance business, especially when the reinsurance operation is a division within a company and not a distinct operating entity that files its own financial statements. While generally speaking all the premium data relate to a company's reinsurance premiums written, in some cases the other ratios and data items will also include primary business.

The main group and country listing for each entity surveyed is representative of that group's or company's total reinsurance business written, whether life, non-life, or a combination of both.

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>AUSTRALIA</b>				
NR	Hannover Life Re of Australasia Ltd.	249.8	195.8	21.6
AA-	Swiss Re Life & Health Australia Ltd.	249.5	189.6	24.0
AA-	Munich Re Co. of Australasia Ltd.	112.0	95.4	14.9
AAA	General Re Life Australia Ltd.	89.7	76.2	15.1
AAA	General Re Australia Ltd.	36.2	33.8	6.7
	<b>Total</b>	<b>737.2</b>	<b>590.7</b>	<b>19.9</b>
<b>AUSTRIA</b>				
A+	Generali Holding Vienna AG	777.6	747.1	4.1
A-	UNIQA Versicherungen AG	638.9	681.2	-6.2
NR	Generali Rück AG	102.5	117.3	-12.6
	<b>Total</b>	<b>1,519.0</b>	<b>1,545.6</b>	<b>-1.7</b>
<b>BAHRAIN</b>				
BBB	Arab Insurance Group (B.S.C.)	150.3	154.0	-2.4
NR	Trust International Insurance Co.	62.2	96.9	-35.8
	<b>Total</b>	<b>212.5</b>	<b>250.9</b>	<b>-15.3</b>
<b>BARBADOS</b>				
NR	Imagine Insurance Co. Ltd.	655.8	516.4	27.0
AA-	Royal Bank of Canada Insurance Co. Ltd.	400.7	366.6	9.3
NR	SCOR Global Life Re International (Barbados) (Revios Re International Barbados Co. Ltd.)	155.6	155.5	0.1
	<b>Total</b>	<b>1,212.1</b>	<b>1,038.5</b>	<b>16.7</b>

A feature of the tables in the 2006 edition of *Global Reinsurance Highlights* was the impact of consolidation of entities within the reinsurance industry. In order to depict the ongoing state of the global reinsurance market into 2007 and beyond, entities that have been amalgamated into other entities as the result of a merger have been excluded from this year's list. Where appropriate, pro forma financial statements have been used to provide the most accurate representation of an entity's ongoing business. To aid comparisons, names of entities used in previous editions of *Global Reinsurance Highlights* have been included here in parentheses after the current names. Please refer to the footnotes for a more comprehensive explanation of the treatment of recently merged entities.

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Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
32.8	23.7	N.M.	N.M.	130.1	121.5	7.1	12.3	10.6
66.0	26.2	N.M.	N.M.	113.1	102.3	10.5	22.6	11.4
16.8	13.2	N.M.	N.M.	108.9	95.2	14.4	6.2	5.5
11.4	5.7	N.M.	N.M.	37.2	30.1	23.8	11.5	6.9
4.1	49.7	108.6	14.0	207.3	201.5	2.9	6.3	69.7
<b>131.0</b>	<b>118.6</b>	<b>N.M.</b>	<b>N.M.</b>	<b>596.7</b>	<b>550.7</b>	<b>8.4</b>	<b>13.2</b>	<b>13.9</b>
31.9	40.1	104.6	105.7	3,038.9	2,179.8	39.4	3.8	4.8
97.9	148.2	104.9	102.1	4,283.7	2,281.2	87.8	12.3	17.1
10.1	28.8	108.1	85.0	1,302.1	878.4	48.2	8.3	21.4
<b>139.9</b>	<b>217.1</b>	<b>105.0</b>	<b>102.3</b>	<b>8,624.7</b>	<b>5,339.4</b>	<b>61.5</b>	<b>8.0</b>	<b>11.9</b>
20.4	9.0	104.1	110.3	293.4	272.4	7.7	11.2	6.0
16.9	18.3	76.3	90.2	173.6	251.6	-31.0	27.2	17.4
<b>37.3</b>	<b>27.3</b>	<b>95.9</b>	<b>101.8</b>	<b>467.0</b>	<b>524.0</b>	<b>-10.9</b>	<b>15.2</b>	<b>10.7</b>
55.8	52.8	102.8	120.1	573.3	526.6	8.9	7.8	9.2
N.A.	71.6	N.M.	N.M.	520.7	529.0	-1.6	37.9	13.8
-2.8	6.2	N.M.	N.M.	6.4	15.1	-57.9	-1.8	3.9
<b>53.0</b>	<b>130.6</b>	<b>N.M.</b>	<b>N.M.</b>	<b>1,100.4</b>	<b>1,070.7</b>	<b>2.8</b>	<b>19.9</b>	<b>10.6</b>

## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>BELGIUM</b>				
AA-	Secura N.V.	320.2	259.6	23.4
	<b>Total</b>	<b>320.2</b>	<b>259.6</b>	<b>23.4</b>
<b>BERMUDA</b>				
AA-	PartnerRe Ltd.	2,223.4	2,139.7	3.9
A+	ACE Tempest Re Ltd.	1,550.4	1,545.7	0.3
A	Arch Re Ltd.	1,365.4	1,657.5	-17.6
AA-	Everest Re (Bermuda) Ltd.	1,360.2	1,382.8	-1.6
A+	XL Re Ltd.	1,288.7	3,125.6	-58.8
NR	Platinum Underwriters Bermuda Ltd.	831.6	1,039.1	-20.0
A+	Renaissance Re Ltd.	728.6	797.5	-8.6
A	AXIS Specialty Ltd.	670.1	719.6	-6.9
A-	Harbor Point Re Ltd. (1)	590.4	N.M.	N.M.
A-	Allied World Assurance Co. Ltd.	572.0	494.0	15.8
A-	Montpelier Re Ltd.	483.8	723.1	-33.1
NR	Validus Re (1)	477.1	N.M.	N.M.
NR	Max Re Ltd.	432.6	837.5	-48.3
A-	IPCRe Ltd.	412.2	450.8	-8.6
A	Amlin Bermuda Ltd. (1)	411.3	N.M.	N.M.
A	Endurance Specialty Insurance Ltd.	400.2	467.2	-14.3
A	Aspen Insurance Ltd.	362.8	430.3	-15.7
A	DaVinci Re Ltd.	310.5	226.5	37.1
NR	Hiscox Insurance Co. (Bermuda) Ltd. (1)	290.0	N.M.	N.M.
NR	Ariel Re Co. Ltd. (1)	286.3	N.M.	N.M.
NR	Flagstone Re Ltd. (1)	282.5	N.M.	N.M.
AA	Tokio Millennium Re Ltd.	250.2	115.4	116.9
A+	ACE Tempest Life Re Ltd.	246.3	231.2	6.5
AA-	Hannover Re Bermuda Ltd.	203.0	259.4	-21.7
A-	Catlin Insurance Co. Ltd.	175.9	144.2	22.0
NR	Lancashire Insurance Co. Ltd. (1)	120.3	N.M.	N.M.
AAA	RAM Re Co. Ltd.	75.5	68.1	10.8
AA	Transamerica Life (Bermuda) Ltd.	53.3	229.8	-76.8
AA	MS Frontier Re Ltd.	45.0	39.1	15.1
AA	Top Layer Re Ltd.	27.8	28.4	-2.3
	<b>Total</b>	<b>16,527.4</b>	<b>17,152.7</b>	<b>-3.6</b>
<b>BOSNIA</b>				
NR	Bosna Re	6.1	8.0	-24.3
	<b>Total</b>	<b>6.1</b>	<b>8.0</b>	<b>-24.3</b>



	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	44.7	35.8	97.3	96.5	245.5	229.1	7.2	12.6	11.9
	<b>44.7</b>	<b>35.8</b>	<b>97.3</b>	<b>96.5</b>	<b>245.5</b>	<b>229.1</b>	<b>7.2</b>	<b>12.6</b>	<b>11.9</b>
	751.0	-152.5	74.1	118.6	3,295.8	2,574.0	28.0	30.5	-6.6
	575.3	-71.8	76.0	115.1	N.A.	N.A.	N.A.	33.2	-4.2
	749.9	287.4	77.1	94.2	3,745.6	2,639.3	41.9	39.9	15.7
	464.3	-230.0	82.4	130.2	1,889.9	1,522.5	24.1	28.9	-15.0
	N.A.	N.A.	52.2	146.2	N.A.	N.A.	N.A.	N.A.	N.A.
	276.6	-65.2	81.5	113.9	1,240.1	967.4	28.2	27.3	-6.1
	649.9	-122.5	33.3	134.7	1,600.0	1,300.0	23.1	76.1	-14.4
	N.A.	N.A.	49.1	110.9	3,726.9	2,998.8	24.3	N.A.	N.A.
	92.2	N.M.	61.8	N.M.	1,357.9	1,334.4	1.8	25.0	N.M.
	504.0	-136.0	75.5	137.6	2,442.0	1,732.0	41.0	35.4	-10.2
	286.0	-794.5	69.6	200.7	1,492.9	1,057.7	41.2	44.6	-85.8
	193.1	N.M.	41.6	N.M.	1,348.8	999.8	34.9	52.8	N.M.
	137.9	-29.6	93.9	105.7	1,390.1	1,185.7	17.2	N.A.	N.A.
	379.9	-616.1	24.2	245.7	1,991.0	1,621.6	22.8	74.4	-120.0
	122.7	N.M.	49.7	N.M.	1,183.4	1,003.5	17.9	40.8	N.M.
	496.9	-58.5	59.8	112.6	2,601.4	2,250.0	15.6	82.0	-9.1
	140.5	-204.6	81.2	188.3	1,082.6	944.6	14.6	30.7	-66.0
	198.5	-194.5	47.8	201.6	1,033.0	681.1	51.7	59.0	-79.2
	138.6	N.M.	46.8	N.M.	607.7	N.M.	N.M.	69.6	N.M.
	163.8	N.M.	43.2	N.M.	1,159.8	1,000.3	15.9	64.7	N.M.
	141.0	N.M.	47.6	N.M.	864.5	547.6	57.9	60.7	N.M.
	123.9	-50.0	71.0	172.7	771.7	685.1	12.6	40.3	-38.3
	153.5	107.3	N.M.	N.M.	N.A.	N.A.	N.A.	53.5	40.0
	172.3	69.4	44.7	90.9	1,265.2	1,060.3	19.3	65.5	24.5
	293.0	28.4	79.5	98.5	1,438.6	889.6	61.7	81.7	14.3
	175.0	N.M.	10.0	N.M.	1,129.5	947.1	19.3	N.M.	N.M.
	43.8	23.7	57.8	80.6	491.2	360.3	36.3	60.8	41.8
	127.0	39.5	N.M.	N.M.	1,163.1	1,071.1	8.6	322.8	13.4
	41.6	-40.7	23.2	213.6	320.4	178.9	79.1	77.0	-94.0
	25.8	25.8	18.5	16.0	53.0	52.4	1.1	87.1	76.5
	<b>7,618.0</b>	<b>-2,184.9</b>	<b>66.9</b>	<b>129.6</b>	<b>40,686.1</b>	<b>31,605.1</b>	<b>28.7</b>	<b>44.8</b>	<b>-14.1</b>
	2.0	0.0	164.7	111.3	9.5	7.4	28.6	14.5	-0.4
	<b>2.0</b>	<b>0.0</b>	<b>164.7</b>	<b>111.3</b>	<b>9.5</b>	<b>7.4</b>	<b>28.6</b>	<b>14.5</b>	<b>-0.4</b>

## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>BRAZIL</b>				
NR	IRB-Brasil Resseguros S.A.	910.3	650.3	40.0
	<b>Total</b>	<b>910.3</b>	<b>650.3</b>	<b>40.0</b>
<b>CANADA</b>				
AA-	Munich Re Co. of Canada	181.8	185.2	-1.8
AA-	Swiss Re Life & Health Canada	142.4	44.1	222.6
A-	SCOR Canada Re Co.	83.2	73.7	13.0
	<b>Total</b>	<b>407.4</b>	<b>303.0</b>	<b>34.5</b>
<b>CAYMAN ISLANDS</b>				
BB+	Scottish Annuity & Life Insurance Co. (Cayman) Ltd.	1,693.6	1,840.2	-8.0
	<b>Total</b>	<b>1,693.6</b>	<b>1,840.2</b>	<b>-8.0</b>
<b>CYPRUS</b>				
BBB	Alliance International Re Public Co. Ltd.	35.3	29.6	19.6
	<b>Total</b>	<b>35.3</b>	<b>29.6</b>	<b>19.6</b>
<b>DENMARK</b>				
AA-	Swiss Re Denmark Re A/S (GE Frankona Re A/S)	298.8	158.6	88.4
	<b>Total</b>	<b>298.8</b>	<b>158.6</b>	<b>88.4</b>
<b>EGYPT</b>				
NR	Egyptian Re Co.	51.5	46.6	10.4
	<b>Total</b>	<b>51.5</b>	<b>46.6</b>	<b>10.4</b>
<b>FRANCE</b>				
A-	SCOR S.A.	1,666.2	1,127.4	47.8
AAA	Caisse Centrale de Réassurance	1,508.7	1,475.5	2.3
A-	PARIS RE (2)	1,254.0	1,362.4	-8.0
AA-	PartnerRe S.A.	779.4	767.5	1.6
	<b>Total</b>	<b>5,208.3</b>	<b>4,732.8</b>	<b>10.0</b>

	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	193.5	337.5	83.3	65.5	763.9	637.3	19.9	21.5	42.6
	<b>193.5</b>	<b>337.5</b>	<b>83.3</b>	<b>65.5</b>	<b>763.9</b>	<b>637.3</b>	<b>19.9</b>	<b>21.5</b>	<b>42.6</b>
	68.9	44.1	76.4	89.7	305.2	305.4	-0.1	30.6	18.8
	54.7	75.0	N.M.	N.M.	234.6	239.7	-2.1	20.4	41.8
	12.6	9.3	101.4	105.6	148.4	142.2	4.4	13.7	11.9
	<b>136.2</b>	<b>128.5</b>	<b>83.8</b>	<b>93.7</b>	<b>688.2</b>	<b>687.3</b>	<b>0.1</b>	<b>23.3</b>	<b>26.1</b>
	-88.6	126.6	N.M.	N.M.	987.4	1,304.7	-24.3	-3.9	5.8
	<b>-88.6</b>	<b>126.6</b>	<b>N.M.</b>	<b>N.M.</b>	<b>987.4</b>	<b>1,304.7</b>	<b>-24.3</b>	<b>-3.9</b>	<b>5.8</b>
	1.1	2.8	101.2	102.3	61.2	54.6	12.1	2.9	9.1
	<b>1.1</b>	<b>2.8</b>	<b>101.2</b>	<b>102.3</b>	<b>61.2</b>	<b>54.6</b>	<b>12.1</b>	<b>2.9</b>	<b>9.1</b>
	104.2	-5.6	94.9	114.5	301.2	217.0	38.8	30.7	-3.2
	<b>104.2</b>	<b>-5.6</b>	<b>94.9</b>	<b>114.5</b>	<b>301.2</b>	<b>217.0</b>	<b>38.8</b>	<b>30.7</b>	<b>-3.2</b>
	26.0	22.4	166.5	128.8	169.1	153.5	10.2	24.5	21.7
	<b>26.0</b>	<b>22.4</b>	<b>166.5</b>	<b>128.8</b>	<b>169.1</b>	<b>153.5</b>	<b>10.2</b>	<b>24.5</b>	<b>21.7</b>
	176.8	214.4	63.5	97.1	1,775.7	1,258.9	41.1	12.0	17.9
	923.9	344.1	51.9	86.2	2,870.7	1,928.5	48.9	53.0	20.9
	370.1	-183.6	76.0	123.6	2,175.1	1,323.4	64.4	26.0	-12.1
	72.4	54.3	105.6	100.0	730.0	667.5	9.4	8.0	6.2
	<b>1,543.2</b>	<b>429.2</b>	<b>78.2</b>	<b>103.0</b>	<b>7,551.5</b>	<b>5,178.3</b>	<b>45.9</b>	<b>27.7</b>	<b>7.2</b>

## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>GERMANY</b>				
AA-	Munich Re Co.	22,015.1	21,150.1	4.1
AA-	Hannover Rück AG (3)	7,486.9	5,131.6	45.9
AA	Allianz SE (4)	3,792.7	3,935.5	-3.6
AAA	Kölnische Rück Ges AG	2,438.3	2,229.9	9.3
AA-	E+S Rück AG	2,413.9	1,635.4	47.6
AA-	Swiss Re Frankona Rück AG (GE Frankona Rück AG)	909.4	849.7	7.0
A+	R+V Versicherung AG	861.7	706.8	21.9
A-	SCOR Global Life Rück AG (Revios Rück AG)	788.2	761.9	3.5
AA-	Swiss Re Germany AG	679.2	624.5	8.8
A-	Converium Rück (Deutschland) AG	504.6	507.1	-0.5
A+	Deutsche Rück AG	425.8	350.0	21.7
BBB-	Wüstenrot & Württembergische AG	358.8	293.1	22.4
A	Versicherungskammer Bayern Konzern-Rück AG	303.9	264.2	15.0
	<b>Total</b>	<b>42,978.5</b>	<b>38,439.7</b>	<b>11.8</b>
<b>HONG KONG</b>				
A-	China International Re Co. Ltd.	177.0	133.9	32.2
	<b>Total</b>	<b>177.0</b>	<b>133.9</b>	<b>32.2</b>
<b>INDIA</b>				
NR	General Insurance Corp. of India	1,455.3	1,120.5	29.9
	<b>Total</b>	<b>1,455.3</b>	<b>1,120.5</b>	<b>29.9</b>
<b>IRELAND</b>				
NR	Hannover Life Re (Ireland) Ltd.	693.9	524.0	32.4
AA-	Hannover Re (Ireland) Ltd. (5)	568.7	362.4	56.9
A	Atradius Re Ltd.	491.4	394.9	24.5
A+	XL Re Europe Ltd. (6)	414.3	453.9	-8.7
AA-	Hannover Re (Dublin) Ltd. (5)	367.2	235.8	55.7
A-	SCOR Global Life Re Ireland Ltd. (Revios Re Ireland Ltd.)	173.2	83.0	108.7
AA-	E+S Re (Ireland) Ltd.	170.4	100.8	69.0
AA	Mitsui Sumitomo Re Ltd.	129.2	90.4	42.9
AA-	Strategic Re Ireland (GE ERC Strategic Re Ltd.) (5)	115.1	153.0	-24.8
AA-	Swiss Re Ireland Ltd.	86.5	34.5	150.7
AA	Tokio Marine Global Re Ltd.	78.0	82.5	-5.5
A+	QBE Re (Europe) Ltd.	70.8	46.3	53.0
NR	RBC Re (Ireland) Ltd.	35.4	41.2	-14.0
A	Cologne Re of Dublin (5)	1.3	142.5	-99.1
	<b>Total</b>	<b>3,395.4</b>	<b>2,745.1</b>	<b>23.7</b>

	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	1,433.3	-283.1	98.5	116.8	39,080.1	32,601.2	19.9	5.5	-1.2
	404.6	240.1	85.9	85.5	6,416.2	5,345.8	20.0	5.1	4.5
	4,290.1	682.2	88.3	89.5	100,243.8	72,641.4	38.0	54.1	14.9
	397.7	358.0	96.5	89.4	2,125.5	1,653.6	28.5	14.9	14.8
	181.0	59.0	92.2	95.5	1,925.6	1,600.5	20.3	6.8	3.4
	286.1	-248.7	84.7	160.7	1,486.5	1,390.7	6.9	23.2	-21.8
	257.1	174.1	97.8	102.6	4,453.0	3,618.5	23.1	23.0	18.2
	108.3	25.6	N.M.	N.M.	774.7	582.5	33.0	10.4	2.6
	340.1	-65.4	66.8	120.7	1,428.5	1,287.8	10.9	42.3	-8.8
	67.9	17.1	85.7	97.4	396.1	330.1	20.0	12.1	3.0
	43.8	42.4	90.0	92.3	594.9	384.5	54.7	9.5	11.2
	67.2	152.3	97.4	97.5	3,584.0	3,945.5	-9.2	16.1	34.3
	91.8	71.9	81.7	84.7	275.5	217.1	26.9	28.0	25.1
	<b>7,969.0</b>	<b>1,225.5</b>	<b>94.4</b>	<b>109.2</b>	<b>162,784.4</b>	<b>125,599.2</b>	<b>29.6</b>	<b>15.5</b>	<b>2.3</b>
	49.2	13.8	95.6	99.9	240.2	179.3	33.9	25.1	8.9
	<b>49.2</b>	<b>13.8</b>	<b>95.6</b>	<b>99.9</b>	<b>240.2</b>	<b>179.3</b>	<b>33.9</b>	<b>25.1</b>	<b>8.9</b>
	405.6	131.6	101.4	122.9	1,329.7	1,049.1	26.7	25.2	9.1
	<b>405.6</b>	<b>131.6</b>	<b>101.4</b>	<b>122.9</b>	<b>1,329.7</b>	<b>1,049.1</b>	<b>26.7</b>	<b>25.2</b>	<b>9.1</b>
	95.3	19.6	N.M.	N.M.	324.4	216.8	49.6	12.4	3.2
	88.2	75.0	101.6	135.6	687.7	583.1	18.0	16.6	13.4
	83.1	94.5	86.5	78.0	450.5	348.6	29.3	18.9	24.3
	N.A.	N.A.	87.2	94.0	N.A.	N.A.	N.A.	N.A.	N.A.
	38.4	32.8	96.0	110.7	263.6	236.2	11.6	11.6	11.6
	9.0	11.1	N.M.	N.M.	96.1	88.5	8.5	4.8	12.0
	14.4	2.6	111.2	163.0	213.0	181.8	17.1	8.9	1.6
	4.9	1.7	97.4	108.0	102.8	88.7	15.9	4.0	2.3
	58.5	5.1	25.4	-50.5	583.5	478.7	21.9	43.4	3.4
	41.6	44.2	158.9	104.2	127.4	137.0	-7.0	36.4	59.2
	16.7	3.9	N.A.	102.4	67.8	53.0	27.9	21.8	4.5
	43.5	3.7	70.8	123.3	296.9	256.0	16.0	46.1	3.9
	38.9	34.0	N.M.	N.M.	103.8	69.4	49.7	51.3	52.0
	28.8	9.8	180.1	113.0	231.2	208.9	10.7	87.7	4.6
	<b>561.3</b>	<b>338.0</b>	<b>95.3</b>	<b>106.6</b>	<b>3,548.6</b>	<b>2,946.6</b>	<b>20.4</b>	<b>18.3</b>	<b>12.6</b>



## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>ITALY</b>				
AA-	Münchener Rück Italia SpA	445.4	429.8	3.6
	<b>Total</b>	<b>445.4</b>	<b>429.8</b>	<b>3.6</b>
<b>JAPAN</b>				
AA	Tokio Marine & Nichido Fire Insurance Co. Ltd. (7)	2,783.4	2,789.3	-0.2
AA-	Sompo Japan Insurance Inc. (7)	1,788.1	1,803.9	-0.9
AA	Mitsui Sumitomo Insurance Co. Ltd. (7)	1,724.2	1,712.6	0.7
A+	Aioi Insurance Co. Ltd. (7)	1,155.5	1,168.2	-1.1
A+	Toa Re Co. Ltd. (7)	1,000.3	947.3	5.6
A+	NIPPONKOA Insurance Co. Ltd. (7)	790.9	830.5	-4.8
A+	Nissay Dowa General Insurance Co. Ltd. (7)	360.7	352.4	2.4
A-	Kyoei Fire & Marine Insurance Co. (7)	181.7	192.5	-5.6
A	Nisshin Fire & Marine Insurance Co. Ltd. (7)	166.8	164.7	1.3
A-	Fuji Fire & Marine Insurance Co. (7)	31.4	29.3	7.2
A-	ACE Insurance (7)	20.4	15.6	30.9
	<b>Total</b>	<b>10,003.4</b>	<b>10,006.3</b>	<b>0.0</b>
<b>JORDAN</b>				
BBB	International General Insurance Co. Ltd. Jordan	75.2	37.7	99.7
	<b>Total</b>	<b>75.2</b>	<b>37.7</b>	<b>99.7</b>
<b>KAZAKHSTAN</b>				
kzBBB-	Eurasia Insurance Co.	8.6	2.6	229.4
	<b>Total</b>	<b>8.6</b>	<b>2.6</b>	<b>229.4</b>
<b>KENYA</b>				
NR	Kenya Re Corp.	39.9	29.0	37.6
NR	East Africa Re Co. Ltd.	10.5	13.9	-24.3
	<b>Total</b>	<b>50.4</b>	<b>42.9</b>	<b>17.6</b>
<b>KOREA</b>				
A-	Korean Re Co.	2,349.5	1,946.7	20.7
	<b>Total</b>	<b>2,349.5</b>	<b>1,946.7</b>	<b>20.7</b>
<b>KUWAIT</b>				
BBB	Kuwait Re Co. K.S.C.	29.3	26.2	11.8
	<b>Total</b>	<b>29.3</b>	<b>26.2</b>	<b>11.8</b>

	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	33.9	18.6	105.4	109.1	307.2	262.7	16.9	7.4	4.7
	<b>33.9</b>	<b>18.6</b>	<b>105.4</b>	<b>109.1</b>	<b>307.2</b>	<b>262.7</b>	<b>16.9</b>	<b>7.4</b>	<b>4.7</b>
	708.7	768.7	N.A.	N.A.	34,429.3	34,542.1	-0.3	16.6	18.3
	745.3	596.5	N.A.	57.2	20,430.9	19,615.6	4.2	25.1	21.3
	413.1	640.6	N.A.	95.0	22,001.4	20,963.3	5.0	2.8	4.2
	188.6	152.1	N.A.	94.8	7,320.4	7,287.1	0.5	75.4	72.0
	-33.6	-126.2	N.A.	121.9	2,371.8	2,161.1	9.7	-2.8	-10.3
	-164.4	155.8	N.A.	99.7	8,479.6	8,858.0	-4.3	-2.0	2.0
	-20.8	-49.5	N.A.	85.5	4,235.4	4,049.5	4.6	N.A.	N.A.
	-49.0	-26.5	N.A.	99.3	1,141.6	1,195.8	-4.5	-2.4	-1.3
	-21.5	9.6	N.A.	97.3	1,488.2	1,544.0	-3.6	N.A.	N.A.
	7.7	44.1	N.A.	95.4	2,610.7	2,283.6	14.3	N.A.	N.A.
	2.7	-1.9	N.A.	117.2	145.4	145.4	0.0	12.2	-12.6
	<b>1,776.8</b>	<b>2,163.3</b>	<b>N.A.</b>	<b>89.6</b>	<b>104,654.7</b>	<b>102,645.5</b>	<b>2.0</b>	<b>5.4</b>	<b>6.4</b>
	14.5	0.7	81.1	112.1	154.0	144.7	6.4	28.4	3.4
	<b>14.5</b>	<b>0.7</b>	<b>81.1</b>	<b>112.1</b>	<b>154.0</b>	<b>144.7</b>	<b>6.4</b>	<b>28.4</b>	<b>3.4</b>
	31.6	30.0	25.8	20.0	109.5	77.6	41.2	35.8	44.6
	<b>31.6</b>	<b>30.0</b>	<b>25.8</b>	<b>20.0</b>	<b>109.5</b>	<b>77.6</b>	<b>41.2</b>	<b>35.8</b>	<b>44.6</b>
	8.4	12.9	94.6	82.1	85.9	72.7	18.2	17.4	35.7
	1.0	0.9	114.8	106.3	11.3	10.3	9.5	7.4	6.3
	<b>9.5</b>	<b>13.9</b>	<b>99.6</b>	<b>90.3</b>	<b>97.2</b>	<b>83.0</b>	<b>17.2</b>	<b>15.2</b>	<b>27.2</b>
	85.1	85.7	97.3	96.1	874.0	716.4	22.0	3.6	4.4
	<b>85.1</b>	<b>85.7</b>	<b>97.3</b>	<b>96.1</b>	<b>874.0</b>	<b>716.4</b>	<b>22.0</b>	<b>3.6</b>	<b>4.4</b>
	5.2	2.9	99.6	104.5	115.8	101.3	14.3	14.7	9.8
	<b>5.2</b>	<b>2.9</b>	<b>99.6</b>	<b>104.5</b>	<b>115.8</b>	<b>101.3</b>	<b>14.3</b>	<b>14.7</b>	<b>9.8</b>

## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>MALAYSIA</b>				
NR	Malaysian Re Bhd.	156.6	146.5	6.9
NR	Labuan Re (L) Ltd.	135.0	126.4	6.8
	<b>Total</b>	<b>291.6</b>	<b>272.9</b>	<b>6.9</b>
<b>MOROCCO</b>				
BBB	Société Centrale de Réassurance	157.8	185.3	-14.8
	<b>Total</b>	<b>157.8</b>	<b>185.3</b>	<b>-14.8</b>
<b>NETHERLANDS</b>				
AA-	Swiss Re Life & Health Nederland N.V.	230.6	217.1	6.2
	<b>Total</b>	<b>230.6</b>	<b>217.1</b>	<b>6.2</b>
<b>NIGERIA</b>				
BBB+	African Re Corp.	255.0	295.5	-13.7
	<b>Total</b>	<b>255.0</b>	<b>295.5</b>	<b>-13.7</b>
<b>POLAND</b>				
BBB-	Polskie Towarzystwo Reasekuracji S.A.	68.6	60.0	14.4
	<b>Total</b>	<b>68.6</b>	<b>60.0</b>	<b>14.4</b>
<b>RUSSIA</b>				
ruA+	Moscow Re Co.	36.5	32.5	12.3
NR	Transsib Re	21.4	10.6	101.9
NR	Russian Re Co. Ltd.	10.7	7.2	48.6
	<b>Total</b>	<b>68.6</b>	<b>50.3</b>	<b>36.4</b>
<b>SINGAPORE</b>				
A-	SCOR Re Asia-Pacific	149.0	117.4	26.9
NR	Singapore Re Corp. Ltd.	26.5	21.2	25.0
	<b>Total</b>	<b>175.5</b>	<b>138.6</b>	<b>26.6</b>
<b>SLOVENIA</b>				
BBB+	Pozavarovalnica Sava, d.d.	113.7	88.5	28.5
	<b>Total</b>	<b>113.7</b>	<b>88.5</b>	<b>28.5</b>

	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	36.2	33.4	85.5	88.6	138.0	186.3	-25.9	20.7	18.2
	N.A.	8.7	95.7	99.6	N.A.	160.6	N.A.	N.A.	6.8
	<b>36.2</b>	<b>42.1</b>	<b>90.1</b>	<b>93.6</b>	<b>138.0</b>	<b>346.9</b>	<b>N.M.</b>	<b>20.7</b>	<b>13.8</b>
	24.8	21.1	121.5	121.0	146.2	122.8	19.1	12.6	10.3
	<b>24.8</b>	<b>21.1</b>	<b>121.5</b>	<b>121.0</b>	<b>146.2</b>	<b>122.8</b>	<b>19.1</b>	<b>12.6</b>	<b>10.3</b>
	53.2	41.1	N.M.	N.M.	243.2	225.1	8.0	15.1	12.6
	<b>53.2</b>	<b>41.1</b>	<b>N.M.</b>	<b>N.M.</b>	<b>243.2</b>	<b>225.1</b>	<b>8.0</b>	<b>15.1</b>	<b>12.6</b>
	23.1	17.2	100.5	99.0	193.9	168.6	15.0	8.8	5.9
	<b>23.1</b>	<b>17.2</b>	<b>100.5</b>	<b>99.0</b>	<b>193.9</b>	<b>168.6</b>	<b>15.0</b>	<b>8.8</b>	<b>5.9</b>
	6.8	5.9	99.2	101.8	51.9	41.1	26.3	8.8	8.9
	<b>6.8</b>	<b>5.9</b>	<b>99.2</b>	<b>101.8</b>	<b>51.9</b>	<b>41.1</b>	<b>26.3</b>	<b>8.8</b>	<b>8.9</b>
	2.9	7.2	99.2	83.4	27.8	25.2	10.3	7.1	22.7
	1.8	1.6	74.8	88.2	7.8	6.2	25.8	9.1	12.5
	1.7	1.5	87.5	84.2	9.3	6.7	38.8	18.5	21.1
	<b>6.4</b>	<b>10.3</b>	<b>91.6</b>	<b>84.6</b>	<b>44.9</b>	<b>38.1</b>	<b>17.8</b>	<b>7.9</b>	<b>19.8</b>
	7.7	-8.2	71.8	113.2	155.3	140.3	10.7	5.6	-7.0
	9.6	9.1	95.3	94.3	118.2	98.7	19.8	24.4	24.1
	<b>17.3</b>	<b>0.9</b>	<b>77.4</b>	<b>109.5</b>	<b>273.5</b>	<b>239.0</b>	<b>14.4</b>	<b>11.4</b>	<b>3.9</b>
	12.4	8.1	98.3	102.9	153.4	126.8	21.0	10.4	8.1
	<b>12.4</b>	<b>8.1</b>	<b>98.3</b>	<b>102.9</b>	<b>153.4</b>	<b>126.8</b>	<b>21.0</b>	<b>10.4</b>	<b>8.1</b>

## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>SOUTH AFRICA</b>				
A-	Munich Re Co. of Africa Ltd.	166.8	202.1	-17.4
NR	Swiss Re Life & Health Africa Ltd.	129.6	140.9	-8.0
AAA	General Re Africa Ltd.	96.0	84.0	14.2
BBB+	Hannover Re Africa Ltd.	86.1	82.9	3.9
NR	Hannover Life Reassurance Africa Ltd.	77.0	69.0	11.6
NR	Swiss Re Africa Ltd.	41.8	82.5	-49.3
NR	African Re Corp. (South Africa) Ltd.	25.4	27.4	-7.2
	<b>Total</b>	<b>622.7</b>	<b>688.8</b>	<b>-9.6</b>
<b>SPAIN</b>				
AA	Mapfre Re Compañía de Reaseguros, S.A.	1,321.2	1,026.6	28.7
A	Nacional de Reaseguros S.A.	349.9	277.9	25.9
	<b>Total</b>	<b>1,671.1</b>	<b>1,304.5</b>	<b>28.1</b>
<b>SWEDEN</b>				
A-	Sirius International Insurance Corp.	910.5	526.0	73.1
A-	Sweden Re Co. Ltd. (Revios Sweden Re Co. Ltd.)	114.5	88.2	29.9
	<b>Total</b>	<b>1,025.0</b>	<b>614.2</b>	<b>66.9</b>
<b>SWITZERLAND</b>				
AA-	Swiss Re Co.	13,373.8	13,577.7	-1.5
AA-	European Re Co. of Zurich (8)	3,775.5	-679.4	N.M.
A-	Converium AG	1,439.9	1,198.7	20.1
AA-	New Re Co.	784.8	630.0	24.6
A+	Deutsche Rück Schweiz AG	452.2	346.8	30.4
NR	Glacier Re	195.3	207.9	-6.1
A+	XL Re Latin America Ltd.	164.9	173.2	-4.8
A-	SCOR Global Life Rück Schweiz AG (Revios Rück Schweiz AG)	77.5	52.7	47.1
NR	The Toa 21st Century Re Co. Ltd.	8.7	11.4	-23.7
	<b>Total</b>	<b>20,272.6</b>	<b>15,519.0</b>	<b>30.6</b>
<b>TAIWAN</b>				
A-	Central Re Corp.	400.7	382.1	4.9
	<b>Total</b>	<b>400.7</b>	<b>382.1</b>	<b>4.9</b>
<b>THAILAND</b>				
BBB+	Thai Re Public Co. Ltd.	72.7	62.1	17.1
	<b>Total</b>	<b>72.7</b>	<b>62.1</b>	<b>17.1</b>



	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	35.2	40.3	89.8	88.4	171.1	187.1	-8.5	18.0	17.9
	63.6	34.2	N.M.	N.M.	125.7	141.0	-10.8	36.9	17.3
	16.0	18.6	105.8	90.3	38.7	44.3	-12.8	14.6	20.1
	15.2	17.5	95.6	90.7	78.6	71.8	9.6	15.6	18.5
	1.7	3.1	N.M.	N.M.	15.3	12.5	23.1	2.0	4.1
	31.0	18.8	56.6	91.0	59.4	63.5	-6.5	52.4	19.0
	4.1	3.9	99.6	94.2	20.6	18.3	12.5	14.7	13.6
	<b>166.8</b>	<b>136.4</b>	<b>86.6</b>	<b>90.4</b>	<b>509.4</b>	<b>538.5</b>	<b>-5.4</b>	<b>22.4</b>	<b>16.8</b>
	70.7	66.4	92.7	98.9	721.5	639.8	12.8	5.8	6.8
	27.8	11.9	92.3	97.1	162.2	156.5	3.6	9.1	4.7
	<b>98.5</b>	<b>78.3</b>	<b>92.6</b>	<b>98.6</b>	<b>883.7</b>	<b>796.3</b>	<b>11.0</b>	<b>6.4</b>	<b>6.4</b>
	231.8	60.0	79.0	99.4	1,436.4	1,068.9	34.4	25.1	9.2
	5.8	7.1	N.M.	N.M.	82.8	44.1	87.7	4.8	7.6
	<b>237.6</b>	<b>67.1</b>	<b>79.0</b>	<b>99.4</b>	<b>1,519.2</b>	<b>1,113.1</b>	<b>36.5</b>	<b>22.7</b>	<b>8.9</b>
	2,682.6	171.7	107.3	113.6	15,298.0	9,728.6	57.2	16.3	1.1
	376.3	80.6	100.9	N.M.	1,243.7	924.1	34.6	9.1	-13.4
	160.4	124.4	90.4	103.1	1,844.1	1,594.7	15.6	10.3	6.3
	236.4	2.3	96.7	137.4	586.1	316.8	85.0	27.0	0.3
	5.6	1.6	101.4	102.2	147.1	90.2	63.2	1.2	0.5
	70.3	-104.2	77.5	182.8	394.1	306.5	28.6	32.5	-75.2
	N.A.	N.A.	108.4	102.0	N.A.	N.A.	N.A.	N.A.	N.A.
	5.2	7.6	N.M.	N.M.	56.8	22.8	148.8	5.0	12.0
	7.8	12.7	19.4	-19.5	189.5	172.4	9.9	59.6	46.0
	<b>3,544.6</b>	<b>296.7</b>	<b>104.3</b>	<b>117.2</b>	<b>19,759.4</b>	<b>13,156.1</b>	<b>50.2</b>	<b>14.9</b>	<b>1.6</b>
	20.7	15.8	93.6	94.4	312.7	285.2	9.6	5.0	6.9
	<b>20.7</b>	<b>15.8</b>	<b>93.6</b>	<b>94.4</b>	<b>312.7</b>	<b>285.2</b>	<b>9.6</b>	<b>5.0</b>	<b>6.9</b>
	17.1	15.3	87.6	45.1	312.7	285.2	9.6	21.7	24.1
	<b>17.1</b>	<b>15.3</b>	<b>87.6</b>	<b>45.1</b>	<b>312.7</b>	<b>285.2</b>	<b>9.6</b>	<b>21.7</b>	<b>24.1</b>

## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>TUNISIA</b>				
BBB+	B.E.S.T. Re Co.	116.2	95.3	22.0
	<b>Total</b>	<b>116.2</b>	<b>95.3</b>	<b>22.0</b>
<b>TURKEY</b>				
trA+	Milli Reasurans T.A.S.	523.6	467.9	11.9
	<b>Total</b>	<b>523.6</b>	<b>467.9</b>	<b>11.9</b>
<b>U.K.</b>				
A+	Lloyd's (9)	8,445.3	6,566.8	28.6
A	Aspen Insurance U.K. Ltd.	936.4	790.5	18.5
AA-	Swiss Re Life & Health Ltd.	654.8	573.1	14.3
A	Endurance Worldwide Insurance Ltd. (10)	294.8	242.4	21.6
NR	Brit Insurance Ltd. (11)	212.7	225.3	-5.6
A+	QBE Insurance (Europe) Ltd.	175.7	231.5	-24.1
BB+	Scottish Re Ltd.	156.7	67.4	132.5
AAA	Faraday Re Co. Ltd.	140.1	153.5	-8.8
AAA	General Re U.K. Ltd.	128.6	133.8	-3.9
AA	Tokio Marine Global Ltd. (10)	123.6	74.1	66.9
A-	SCOR U.K. Co. Ltd.	118.1	63.5	86.0
NR	Hannover Life Reassurance (U.K.) Ltd.	109.3	83.3	31.3
NR	Swiss Re Frankona Re Ltd. (GE Frankona Re Ltd.) (12)	108.6	280.5	-61.3
A-	SCOR Global Life Re U.K. Ltd. (Revios Re U.K. Ltd.)	57.6	40.5	42.2
NR	Platinum Re (U.K.) Ltd. (10)	41.9	70.4	-40.4
AA-	Great Lakes Re (U.K.) PLC	35.0	308.4	-88.7
NR	Markel International Insurance Co. Ltd. (11)	21.2	15.8	34.1
NR	Kyoei Mutual Fire & Marine Insurance Co. (U.K.) Ltd.	1.5	1.4	10.2
AA-	Swiss Re Co. (U.K.) Ltd. (13)	-2,002.9	167.9	N.M.
	<b>Total</b>	<b>9,759.0</b>	<b>10,090.1</b>	<b>-3.3</b>
<b>U.S.</b>				
AAA	National Indemnity Co. (14)	3,914.8	2,902.6	34.9
AA-	RGA Re Co.	3,904.5	3,557.0	9.8
AA-	Swiss Re Life & Health America Inc.	3,307.8	3,220.9	2.7
AA-	Transatlantic Re Co.	3,145.4	2,395.2	31.3
AA-	Munich Re America Inc.	2,859.4	2,897.8	-1.3
AA-	Everest Re Co.	2,187.1	2,283.3	-4.2
NR	Hannover Life Reassurance Co. of America	1,842.6	758.7	142.9
A+	Berkley Insurance Co.	1,800.7	1,738.9	3.6
A-	Odyssey America Re Corp.	1,741.2	1,875.2	-7.1

	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	9.4	7.1	87.2	89.8	121.3	72.1	68.2	7.9	7.1
	<b>9.4</b>	<b>7.1</b>	<b>87.2</b>	<b>89.8</b>	<b>121.3</b>	<b>72.1</b>	<b>68.2</b>	<b>7.9</b>	<b>7.1</b>
	45.0	31.1	103.5	98.6	447.2	415.1	7.7	8.1	6.4
	<b>45.0</b>	<b>31.1</b>	<b>103.5</b>	<b>98.6</b>	<b>447.2</b>	<b>415.1</b>	<b>7.7</b>	<b>8.1</b>	<b>6.4</b>
	7,254.7	-378.5	80.9	135.1	25,134.1	18,048.7	39.3	25.7	-1.7
	154.0	69.4	90.6	81.9	2,341.9	1,616.7	44.9	20.6	6.8
	987.9	198.9	N.M.	N.M.	956.4	1,246.3	-23.3	224.2	38.1
	6.4	-65.7	106.8	134.8	109.5	99.9	-9.6	2.4	-28.8
	92.9	19.5	91.7	141.2	797.7	600.8	32.6	24.3	2.0
	51.9	59.6	103.4	100.5	527.6	509.3	3.6	14.1	11.4
	-57.6	-34.5	N.M.	N.M.	68.0	66.4	-9.2	-71.2	-44.6
	55.1	52.0	100.3	94.7	275.9	228.1	20.9	25.0	30.3
	76.1	49.3	81.5	65.2	556.5	424.9	31.0	41.6	35.4
	22.9	9.3	89.0	108.6	272.4	228.7	19.1	54.7	27.2
	15.2	13.4	101.3	97.3	145.2	115.2	26.1	11.3	17.8
	19.4	7.9	N.M.	N.M.	86.7	87.6	-1.0	14.8	8.0
	-56.1	-75.3	118.1	191.4	7.5	577.3	-98.7	-29.1	-18.7
	2.2	-10.2	N.M.	N.M.	45.2	97.0	-53.4	7.6	-32.0
	-7.1	-12.1	98.5	155.5	172.8	157.3	9.9	-10.1	-12.8
	83.2	75.0	60.3	89.7	448.2	371.0	20.8	76.9	25.6
	35.0	21.7	35.0	67.7	320.1	287.6	11.3	55.7	83.6
	-0.6	-0.9	116.4	167.8	20.5	17.8	15.1	-22.1	-36.6
	175.0	108.5	99.4	69.2	844.1	453.9	86.0	-9.9	48.3
	<b>8,910.5</b>	<b>107.3</b>	<b>82.2</b>	<b>127.8</b>	<b>33,130.3</b>	<b>25,234.5</b>	<b>31.3</b>	<b>29.8</b>	<b>0.2</b>
	7,020.8	-427.5	63.3	113.1	35,562.6	28,720.4	23.8	71.1	-4.3
	43.8	-18.8	N.M.	N.M.	1,050.1	975.1	7.7	1.4	-0.4
	296.2	410.6	N.M.	N.M.	2,140.1	2,341.3	-8.6	8.7	12.4
	475.7	-75.7	94.4	113.5	3,059.5	2,618.0	16.9	13.7	-2.3
	579.1	-1,376.1	94.4	221.0	3,773.9	3,041.4	24.1	19.5	-112.0
	434.7	-93.9	95.8	117.1	2,704.1	2,327.6	16.2	17.5	-3.6
	2.0	2.9	N.M.	N.M.	111.4	113.1	-1.5	0.3	0.7
	530.6	242.5	94.3	99.3	2,178.7	1,785.2	22.0	24.4	13.1
	333.8	-218.9	90.4	116.9	2,501.6	2,071.3	20.8	17.0	-11.1

## Global Reinsurer List By Country

Rating As Of Aug. 22, 2007	Company	Net Reinsurance Premiums Written (Mil. \$)		
		2006	2005	Change (%)
<b>U.S. continued</b>				
AA-	Swiss Re America Corp.	1,614.8	2,031.2	-20.5
A+	Employers Reassurance Corp.	1,517.5	-148.8	N.M.
AAA	General Re Corp. (14)	1,447.1	1,657.8	-12.7
AAA	General Re Life Corp.	1,053.8	1,120.4	-6.0
A+	XL Re America Inc.	1,001.8	1,168.0	-14.2
AA-	Munich American Reassurance Co.	960.2	822.2	16.8
BB+	Scottish Re (U.S.) Inc.	843.9	1,618.9	-47.9
AA-	Employers Re Corp.	827.7	1,762.2	-53.0
AA	Transamerica Occidental Life Insurance Co.	745.3	1,141.1	-34.7
AA-	Partner Re Co. of U.S.	716.8	678.3	5.7
A-	Folksamerica Re Co.	715.6	732.3	-2.3
A	Endurance Re Corp. of America	589.6	583.4	1.1
AA	Transamerica Financial Life Insurance Co.	532.0	600.0	-11.3
A	AXIS Re Co.	489.2	440.1	11.2
A+	QBE Re Corp.	468.8	428.5	9.4
A	Generali USA Life Reassurance Co.	453.8	376.2	20.6
Api	American Agricultural Insurance Co.	428.8	427.3	0.3
NR	GE Re Corp.	428.3	392.0	9.3
AA	Reliastar Life Insurance Co.	352.5	235.1	49.9
AA-	Reassure America Life Insurance Co.	325.3	-930.8	N.M.
A-	SCOR Life U.S. Re Co.	318.8	350.8	-9.1
NR	Platinum Underwriters Re Inc.	307.3	601.8	-48.9
A+	Toa Re Co. of America	273.8	256.5	6.7
AA-	Putnam Re Co.	165.5	154.5	7.2
AA	Transamerica Life Insurance Co.	152.9	-21.0	N.M.
AAA	Berkshire Hathaway Life Insurance Co. of NE	138.2	183.9	-24.8
NR	Wilton Reassurance (U.S.)	127.1	70.6	80.0
BB+	Scottish Re Life Corp.	120.5	134.7	-10.5
A	Arch Re Co	93.8	65.4	43.5
A-	SCOR Re Co.	86.8	122.4	-29.1
NR	Revios Re U.S. Inc.	28.4	262.6	-89.2
NR	Converium Re (North America) Inc. (15)	16.5	32.4	-49.0
	<b>Total</b>	<b>42,045.9</b>	<b>38,979.2</b>	<b>7.9</b>

	Pretax Operating Income (Mil. \$)		Combined Ratio (%)		Total Adjusted Shareholders' Funds (Mil. \$)			ROR (%)	
	2006	2005	2006	2005	2006	2005	Change (%)	2006	2005
	508.8	45.1	121.5	115.2	3,014.8	2,775.8	8.6	19.5	1.9
	-337.1	-185.9	N.M.	N.M.	421.1	252.9	66.5	-20.8	-92.3
	756.3	351.3	90.9	114.5	8,576.8	7,894.1	8.6	35.6	14.1
	45.3	26.7	N.M.	N.M.	392.3	368.4	6.5	3.8	2.3
	N.A.	N.A.	90.2	126.8	N.A.	N.A.	N.A.	N.A.	N.A.
	-59.8	-51.5	N.M.	N.M.	544.3	532.2	2.3	-3.8	-3.9
	-2,501.2	-206.5	N.M.	N.M.	306.4	491.1	-37.6	-187.5	-42.0
	437.3	-1,589.5	140.7	196.8	3,606.3	5,388.9	-33.1	16.8	-58.2
	-463.7	-247.1	N.M.	N.M.	2,892.1	2,132.7	35.6	-11.6	-6.6
	68.2	-45.2	104.0	118.0	652.5	565.6	15.4	8.3	-5.8
	53.4	-151.8	105.3	126.7	1,153.3	1,074.2	7.4	6.7	-16.9
	67.5	-69.1	84.4	56.6	571.4	514.8	11.0	9.4	-9.7
	125.6	150.2	N.M.	N.M.	888.1	802.1	10.7	4.0	4.8
	N.A.	N.A.	107.6	126.4	550.9	524.1	5.1	N.A.	N.A.
	66.9	37.9	95.5	96.2	545.6	539.5	1.1	13.7	8.7
	-10.4	-12.0	N.M.	N.M.	240.2	244.9	-1.9	-3.2	-4.2
	17.5	39.4	20.1	97.4	484.5	459.0	5.6	3.7	8.7
	159.1	-706.3	87.3	267.2	847.1	1,041.4	-18.7	30.4	-130.7
	248.6	294.7	N.M.	N.M.	2,323.5	1,880.1	23.6	5.8	6.9
	106.2	96.3	N.M.	N.M.	338.2	561.5	-39.8	7.4	30.9
	4.8	6.5	N.M.	N.M.	238.6	232.8	2.5	1.1	1.4
	155.5	-24.8	36.3	110.9	530.8	447.2	18.7	36.4	-3.6
	36.8	-12.2	101.4	115.7	426.7	383.7	11.2	10.9	-3.8
	26.7	-2.3	96.3	113.5	138.1	114.2	20.9	14.6	-1.4
	354.9	294.2	N.M.	N.M.	2,042.8	2,418.1	-15.5	3.9	3.8
	115.9	72.7	N.M.	N.M.	862.0	479.1	79.9	35.1	20.7
	-123.4	-23.9	N.M.	N.M.	202.4	54.4	272.3	-65.8	-30.6
	-49.7	7.9	N.M.	N.M.	81.3	74.3	9.4	-24.5	4.9
	32.3	31.5	19.2	68.9	691.7	636.4	8.7	32.9	40.7
	3.3	-25.2	126.0	152.9	464.6	462.5	0.5	2.5	-15.7
	-59.6	17.5	N.M.	N.M.	52.6	107.1	-50.8	-80.6	5.0
	-37.4	39.3	524.8	122.9	377.5	394.8	-4.4	-60.9	25.4
	<b>9,465.2</b>	<b>-3,397.5</b>	<b>94.0</b>	<b>127.6</b>	<b>87,540.3</b>	<b>77,841.4</b>	<b>12.5</b>	<b>17.1</b>	<b>-5.3</b>

## Global Reinsurer List By Country

1. The company only began writing significant volumes of business in 2006. As such, 2005 figures do not form meaningful comparisons.
2. During 2006, the renewal rights to the ongoing business of AXA Re were acquired by the newly formed PARIS RE. Numbers presented are based on pro forma financial statements for PARIS RE.
3. The combined ratio relates to both non-life and life business.
4. The company writes predominantly intragroup reinsurance on an arm's-length basis. Adjusted shareholders' funds relate to Allianz SE.
5. The company writes financial reinsurance. Consequently, the combined ratio is a poor proxy for performance when compared with companies writing traditional business.
6. During 2006, the business of XL Re Europe (France) was transferred to a new operating entity based in Dublin. Comparatives for 2005 reflect business previously written by XL Re Europe (France).
7. 2006 data unavailable at time of publication on a basis consistent with the prior year.
8. 2005 figures have been materially affected by a retrocession agreement within Swiss Re with respect to in-force business.
9. Net premiums written and the combined ratio relate to reinsurance business only; all other items include direct business.
10. Data relate to total business.
11. Data relate to treaty business only.
12. Adjusted shareholders' funds were materially affected by a Part VII transfer of business in 2006.
13. Premiums for 2006 are materially affected by additional reinsurance purchased by the company during the year from its ultimate parent company in respect of claims liabilities it assumed from the Part VII transfer from Swiss Re Frankona Re.
14. Figures exclude the impact of General Re Corp.'s stop-loss contract and loss portfolio transfer with National Indemnity Co.
15. During 2006, the company was purchased by National Indemnity Co.

Net reinsurance premiums written = gross reinsurance premiums written less reinsurance premiums ceded; relate to a company's or group's reinsurance business only, unless where separately indicated.

Pretax operating income = underwriting profit (or loss) + net investment income + other income. Net realized gains/losses are excluded from this item.

Combined ratio = (net losses incurred + net underwriting expenses)/net premiums earned.

Total adjusted shareholders' funds = capital + shareholders' reserves (including claims-equalization reserve and any excess or deficiency of market value of investments over the balance sheet value).

ROR = pretax operating income/total revenue. (Total revenue = net premiums earned + net investment income + other income.)

NR—Not rated.

N.A.—Not available.

N.M.—Not meaningful.



# Insurance Regulation In The Midst Of A Global Revolution

**A**lthough the U.S. was historically the leader in global insurance regulation and accounting, other parts of the world are now setting new standards and there are mounting pressures for global convergence. Striking the right balance between regulatory robustness and operational flexibility is an ongoing challenge for the global insurance sector.

The insurance sector is not immune to the fast-moving and increasingly globalized world economy. Regulatory barriers are being dismantled, and both regulatory regimes and accounting standards are converging across continents.

## Principles-Based, Risk-Sensitive Regulation Is Becoming The Norm

The U.S. has long been held out as the global leader in insurance regulation. The introduction of its risk-based capital models in the 1980s set a global standard that was to remain unchallenged for at least a decade. The mantle passed to Canada in the late 1990s (Dynamic Capital Adequacy Testing), and in the 21st century the pace has been set by Australia (including risk margins for non-life reserving), the U.K. (Individual Capital Adequacy Standards), and Switzerland (Swiss Solvency Test). All of these developments have resulted in a more principles-based (rather than rules-based, which demands new rules for each innovation as they emerge over time) approach to regulation and have involved increasing levels of risk sensitivity. The EU is set to raise the bar still higher with its Solvency II project (see *"Solvency II: A Short Reprieve, But Europe's Insurers Should Ignore It At Their Peril"* on page 47), which should come into force by 2012 for Europe's 27 member states. Some of these states have already implemented Solvency II measures, or are likely to have done so ahead of the 2012 target.

The resulting change management program required by most regulators is daunting (as it is for most insurers too). Many regulators have a heritage of legalistic, desk-based, retrospective analysis. They will have to transform the way that they operate in a fairly short space of time to accommodate a more forward-thinking outlook, where substance takes precedence over form.

The U.S. is now behind the curve in this respect, with its state-based system seemingly stifling regula-

tory innovation. The long-discussed reform of reinsurance collateral illustrates this. The proposal to form a "reinsurance evaluation office," although symbolic in that reform is being contemplated at all, is only expected to make very modest changes to current requirements in a true economic sense—Standard & Poor's Ratings Services believes that even if collateral requirements were eliminated totally, its ratings on U.S. insurers would barely be affected—but have taken years to get to the current position. Many of the advocates of change have recently moved on to new regulatory, political, or commercial roles, so it still remains to be seen whether the reform will come to fruition. Discussions under way in the U.S. on principles-based reserving may also take years to finalize.

The same system also stifles product innovation since, unlike most of the rest of the developed world, policy forms and premium rates still need regulatory approval for most lines of business. This has not been the case in Europe since the mid-1990s, as market forces are largely left to determine premium rates. The politicization of the insurance of natural catastrophes in states such as Florida and Louisiana is a further issue (see *"Private Reinsurers Find Business Opportunities Amid The Legislative Changes In Florida"* on page 50).

U.S. insurers are becoming concerned that they may be placed at a substantial competitive disadvantage as regulatory change sweeps across much of the rest of the world. Many U.S. insurers are placing their hopes on progress toward an "optional federal charter" to provide an alternative to the state-based system, but it may take a decade for such a system to be legislated for and up and running.

Pressure for change is also emerging from the regulatory community, notably via the International Association of Insurance Supervisors (IAIS). Like the IASB in the accounting field, the IAIS was something of a backwater in global regulation until fairly recently. Now the

## Global Overview

IAIS has got real traction. It is creating global regulatory standards inspired by best practices among its member countries—Solvency II, for example—and these countries are encouraged to aspire to these standards. Failure to do so may mean that fellow regulators will look upon such countries adversely, either for the purposes of group supervision where companies have foreign subsidiaries or in assessing the quality of insurers' reinsurance assets.

Since capital is increasingly portable around the world, competition will heat up among regulators and governments to retain existing companies and attract new capital. Regulators will need to strike the right balance between regulatory robustness and operational flexibility for regulated businesses. In Europe, under Solvency II Pillar 3 proposals, regulatory robustness will be peer reviewed and coordinated by the Committee of European Insurance and Occupational Pensions Supervisors. This may be expanded to the global stage in the longer term, possibly under the auspices of the IAIS or of the IMF. Regulators will want to prepare for this day.

### Insurance Accounting Is Converging On Principles-Based IFRS

Accounting convergence, as well as regulatory convergence, is also on the global agenda. Only a decade ago, the accounting standards produced by the IASB had little impact on the global stage. National accounting standards prevailed. That all changed when the EU announced it would adopt the IASB's standards for the purpose of its financial markets regulation from 2005 onward. All listed companies in the EU are now obliged to file financial statements prepared in accordance with IFRS. IFRS is becoming truly global, being well established in Asia already and with China and India expected to be the latest converts. Until recently, the U.S. has been the exception, reporting instead under U.S. GAAP.

IFRS was given additional impetus by the announcement that the IASB and FASB would work toward converging their accounting standards. More recently, the SEC has indicated that it may by 2009 drop the requirement for registrants not domiciled in the U.S. to file either financial statements prepared under U.S. GAAP or a reconciliation of their financial statements to U.S. GAAP. Furthermore, U.S.-domiciled companies may be permitted to file financial statements prepared under IFRS, rather than U.S. GAAP. U.S. GAAP is perceived as a rules-based approach to financial reporting, whereas IFRS is more principles based. In this day and age, where new products, new risks, and new risk mitigants are appearing on a daily basis, a rules-based approach demands frequent and substantial revisions. Principles-based approaches provide a framework for dealing with new developments and are now being favored globally, including by the SEC and FASB. Many see the SEC's announcements as the beginning of the end for U.S. GAAP.

Insurance is frequently viewed as the laboratory for the IASB's development of fair value standards. It is the only industry that is currently on a path toward a comprehensive valuation of its assets and liabilities at fair value. The IASB's initially controversial plans were given added traction by the European Commission's Solvency II initiative, which has adopted valuation principles very closely aligned with the IASB's current plans.

Many non-life insurers in the U.S. are horrified at the prospect of having to build risk margins and discount into the valuation of their insurance liabilities. U.S.-based users also question the need for change given that U.S. GAAP for insurers has a heritage of more than 30 years. Since the Europeans are relatively supportive of the broad principles laid out in the IASB's recent discussion paper, and they will have to adopt them for Solvency II in any case, IFRS has much momentum behind it. U.S. insurers should be braced for a battle!

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# Solvency II: A Short Reprieve, But Europe's Insurers Should Ignore It At Their Peril

**S**olvency II is influencing the pace of change in the European insurance market. Its implications will be far reaching, and (re)insurers will have to act fast to meet its requirements.

Insurance is experiencing a revolution globally, which is changing the competitive landscape. Solvency II promises much for market efficiency in Europe, but insurers and supervisors are far from ready. This was recently acknowledged by the European Commission (EC) in postponing the planned implementation date by two years to 2012.

The results of Quantitative Impact Study 3 (QIS3) are expected in the autumn, and the proposal for the Solvency II Directive was published on July 10. While some insurers and supervisors will be heaving a sigh of relief at the postponement, even the 2012 target is still a huge challenge. Standard & Poor's Ratings Services believes it will have a profound impact, although many insurers have yet to evaluate its effect on them, feeling that it is not sufficiently imminent to warrant a full analysis. This is a stance they may come to regret.

The EC, European Parliament, Council of Ministers, and Europe's supervisors will need to proceed cautiously with Solvency II's implementation to allow an orderly transition. Further quantitative impact studies, with fully representative participation, will be crucial in determining the financial and operational readiness of Europe's insurers.

## Solvency II Drives Pace Of Change In Europe

We consider that the global insurance industry is in the midst of a revolution. This is driven by:

- Improved risk management practices,
- Capital markets developments,
- Much improved transparency,
- Accounting convergence, and
- Supervisory/regulatory convergence.

The pace of change is most rapid in Europe, partly because of the specter of Solvency II. Europe promises to set a global standard, surpassing the U.S. (which

held the lead until the late 1990s), as well as Canada, Australia, the current U.K. model, and arguably the global banking model too.

Solvency II will certainly provide much more intelligent and risk-sensitive supervision than Solvency I, although it will require much more calibration of capital requirements and provoke much more debate before the finished product is delivered. In a recent speech, Thomas Steffen, the new chairman of the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS), mentioned the possibility of a QIS6. With QIS4 slated for spring 2008, the EC has bowed to the inevitable in postponing the implementation date. It wants to see the Directive (planned for 2009) and all implementing measures (by 2010) finalized, giving the industry at least 18 months to prepare with certainty for 2012.

Solvency II has given rise to many issues so far, including:

- The likely level of insolvencies under Solvency II,
- Its impact on market consolidation,
- The readiness of insurers and their supervisors,
- The impact on policyholders,
- The impact on transparency,
- The interaction with accounting developments, and
- The supervision of insurance groups.

## Insolvencies May Increase

Perhaps surprisingly to the casual observer, Solvency II will probably result in more insurer failures than in the past. A number of countries seem to have operated a zero tolerance of failure under Solvency I. Under Solvency II, this will change to an explicit tolerance, which crudely equates on average to 0.5% of Europe's insurers failing each year. This gives rise to the need for debate on policyholder compensation schemes.

### Market Consolidation Will Likely Accelerate

In the medium term, Solvency II will probably accelerate consolidation, especially in Germany and southern Europe. Small and undiversified groups rightly feel particularly threatened. These insurers had reason to be concerned based on the QIS2 calibration, although somewhat less so under QIS3. Because of the low level of participation of this type of entity in quantitative impact studies so far, their voice is not being heard. They need to participate and make their case soon, before it is too late.

### Larger Insurers Are Well Prepared, But Not So The Smaller Players

The threat is not limited to relatively high capital requirements for smaller companies—arising from lower diversification benefits compared with larger groups, many of which will be assessed against their internal models—and consequent implications for price competitiveness. It is also about having the skills, resources, and systems in place to respond to Solvency II-style supervision. The people with the necessary skills are scarce and are being pursued by insurers, consultants, accountancy firms, investment banks, rating agencies, and supervisors. This raises major concerns about insurer and supervisory readiness for Solvency II.

The largest insurers are relatively well prepared, but this is not the case for most insurers nor, in our opinion, supervisory bodies. Many have a heritage of legalistic, desk-based, retrospective analysis. They will have to transform the way that they operate in a fairly short space of time to accommodate a more prospective outlook, where substance takes precedence over form.

Solvency II requires extensive actuarial skills in establishing insurers' available capital and capital requirements. Some of the required techniques are only in use at Europe's larger groups today. This is exacerbated by the fact that the actuarial profession is not well established in some parts of Europe. Even where it is well established, the skills required are held by relatively few.

Many companies will also need to rapidly enhance their core computer systems to provide the data and analysis that Solvency II will require. The IT spend will run into billions of euros. The European Insurance and Reinsurance Federation conservatively puts the cost of Solvency II implementation in Europe at €4 billion-€6 billion.

We do not think that Solvency II itself should be blamed for this consolidation, however. It is down to market forces and will happen anyway—admittedly spurred on by Solvency II, along with improving product transparency meaning that consumer choices are becoming clearer.

Much of the insurance market is already highly consolidated: the global reinsurance market, the global large industrial lines market, and personal lines markets in the U.K., Ireland, the Nordic countries,

and Benelux. Ultimately, and regardless of Solvency II, insurers' survival depends on being good at what they do and either having scale and diversity or a defensible niche product or niche distribution platform. If insurers do not possess these characteristics, it will be hard for them to remain in business in their current form.

### Policyholders Will Be Directly Affected

Under Solvency II, premiums will be calculated in an increasingly scientific and risk-sensitive way. More risks (such as flood) may become unaffordable, or even uninsurable.

There will also be less incentive for insurers to hold equity investments under Solvency II. QIS2 included a 40% charge for equity holdings, albeit reduced to 32% in QIS3, compared with zero in most countries under Solvency I. Consequently, there will be less equity backing of nonlinked life insurance products offered to consumers, thereby limiting future retirement financing through insurance-based pension products.

### Transparency Will Improve Further

Transparency has already improved vastly in Europe in recent years, and market pressure has transformed some of Europe's former laggards into global leaders of transparency initiatives. The supervisory standard on transparency in Europe is poor, however. Currently, there is little or no public disclosure of supervisory returns outside the U.K./Ireland. Solvency II will change this. Pillar 3 proposals include a requirement for public Solvency & Financial Condition Reports, which will elevate disclosure to a new level, inclusive of Pillar 2 capital add-ons, although this particular disclosure concerns many supervisors. Such information will be very useful for users of financial information, whether consumers, financial analysts, or investors.

### Late Implementation Of IFRS Forces The EC To Set The Standard

Things have not gone quite according to plan. IFRS for insurance was originally meant to be fully bedded down by now, in readiness for Solvency II, but in our view it is unlikely to be live before 2012.

This has meant that the EC has had to prescribe an approach of its own. The principles for doing so include valuing assets and liabilities in a manner that is fairly closely aligned with the IASB's so-called "current exit value" and the views of the International Association of Insurance Supervisors (IAIS). On the face of it, there does seem to be a converging path, which is positive.

The IASB is now working separately on its fair value principles, however. There is no guarantee that the current exit value framework included in its recent discussion paper will qualify as fair value. If it does not, that would be a very unfortunate outcome.

The objections of Europe's larger insurers to the IASB's proposals have waned, partly because they

want to avoid separate accounting systems for reporting to shareholders and to supervisors. If the EC's proposals are accepted, it will make the IASB's job easier. It was meant to be the other way around, however!

With the IASB's discussion paper having been published in May 2007, the U.S. now starts its involvement in the debate in a meaningful way. The U.S. property/casualty insurance industry's objections to the use of risk margins and discount for non-life liabilities (advocated by the IASB, the EC, and the IAIS) are already well known. This could easily result in pushing IFRS Phase II implementation beyond 2012 if a unified standard is pursued.

### **Supervision Of International Insurance Groups' Capital Adequacy May Prove Problematic**

The future supervision of Europe's insurance groups is one of the most controversial aspects of the Solvency II proposals. Most parties expect the lead supervisor of an insurance group to have greater responsibilities, but the controversy starts where this relates to subsidiaries beyond the lead supervisors' national borders.

A significant proportion of the real economic diversification benefits enjoyed by insurance groups, and measured by their internal models, are derived from geographic diversification. Groups will only be able to realize those benefits in a meaningful way if they can allocate them to their subsidiaries, and carry less local capital as a result. This may mean that subsidiaries will carry less than a stand-alone solvency capital requirement. In light of their statutory obligations, many supervisors are uncomfortable with the loss of control that this implies.

In terms of market efficiency, it would seem unreasonable for supervisors to ignore this level of diversification, albeit derived from somewhere outside their direct control. This is where the mutual recognition and trust between European supervisors, which Solvency II is meant to create, starts to bite. Nevertheless, it is fair to acknowledge that if large groups are allowed to benefit in this way, it will further reinforce their competitive position relative to smaller insurers across Europe.

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# Private Reinsurers Find Business Opportunities Amid The Legislative Changes In Florida

**The politics surrounding catastrophes is developing fast, particularly in Florida. The demand for private reinsurance has diminished as a result, but reinsurers retain the ability to innovate within the new constraints.**

Recent legislative changes in the State of Florida (U.S.) were originally expected to affect the reinsurance sector's pricing and capacity significantly. Some private reinsurers are not only adjusting but are benefiting, finding new profit opportunities in the altered marketplace.

Florida's insurance and reinsurance reform bill was passed in January 2007. The reforms expanded the scope of Florida Hurricane Catastrophe Fund's (FHCF) operations by creating what they referred to as a "temporary increase in coverage limit" option. This option is in place for 2007-2009 and provides insurers with optional reinsurance of up to \$12 billion above the FHCF industry limit for 2007, which is an estimated \$16 billion. The State Board of Administration also may increase the coverage limit by an additional \$4 billion.

The purpose of the bill is to lower insurance and reinsurance premiums in Florida. As a result of the reforms, we expect that property insurance rates will decline by 22% on average.

FHCF's property reinsurance rates generally cost primary insurance companies about 25% less than reinsurance would cost from private reinsurers. FHCF can offer such low rates because it is a state-sponsored competitor to the private reinsurance sector, neither pursuing a profit nor paying brokerage commissions. The proponents of the plan expected that primary companies would pass on the lower cost of reinsurance to their policyholders in the form of lower rates.

Given the low cost of this additional reinsurance, it is likely that most insurers will make the economic decision to purchase it. In addition, FHCF is offering a lower retention level than the current \$6 billion estimated for 2007, allowing insurance companies the option of purchasing \$3 billion, \$4 billion, or \$5 billion retentions. FHCF has set pricing for the coverage options at rates on line of 85%, 80%, and 75%,

respectively. This pricing will likely limit the use of this coverage option. Whether or not these offerings generally reflect the risks involved, they raised doubts about the ability of private reinsurers to continue to compete for Florida risks.

Private reinsurers have nevertheless found their own opportunities in the reforms. For example, because the focus of the reforms was to have FHCF provide additional capacity and lower rates for the more severe catastrophic events, some private reinsurers have recognized an opportunity to write exposures below FHCF's attachment point. Other private reinsurers have found profitable business in providing coverage alongside FHCF and above FHCF's limit. However, although these opportunities to avoid competing directly with FHCF will benefit some reinsurers, the overall capacity available to the market is up because the new legislation has potentially increased FHCF's capacity by about \$16 billion. Therefore, reinsurers might be competing among themselves, which could create price competition for risks that FHCF is not targeting.

Although, as noted above, FHCF's goal is to provide capacity and lower rates for the more severe catastrophic events, there's a chance that such an event could exhaust FHCF's increased capacity. The possibility of an event exhausting the increased capacity of FHCF is viewed on an aggregate basis near a one-in-60-year return period. The probability of reaching FHCF's increased full limit is even higher if issues such as demand surge, population growth, and housing trends are taken into account. Standard & Poor's Ratings Services expects reinsurance companies to maintain capital levels to support property catastrophe exposures at a one-in-250-year net aggregate level. Simply, the expectation of our criteria is significantly different than the level of protection FHCF is providing





at an industry level, though reinsurance protection with FHCF will vary by company.

Separately, FHCF's long-term sustainability at the lower prices being offered is also unclear. The result is that the second area the reinsurance sector has been targeting is offering capacity for multiple events and, potentially, aggregate events after the first two or three occurrences. These are events that FHCF does not cover, as FHCF protection is normally only for the first two or three events. As of June 30, 2006, FHCF had net assets of negative \$1.5 billion (net assets are the difference between assets and liabilities).

Following the catastrophe events of 2004 and 2005, FHCF paid participating insurers about \$8.5 billion. The result was a shortfall that led to FHCF issuing \$1.35 billion in revenue bonds to meet its obligations. This then resulted in FHCF issuing pre-event liquidity financing of \$2.8 billion in 2006. The key here is that considering the potential for FHCF's capacity to be exhausted, reinsurers have found a market at coverage levels where FHCF is unable to compete.

Reinsurers that maintained a concentrated catastrophe focus within their competitive risk profile, many of which are based in Bermuda, could face the most significant challenges from these new law changes. One reason is that Florida offered the ability to earn a significant amount of premiums and often was a key zone for providing catastrophe reinsurance coverage as part of a global portfolio of risks. The additional capacity now available from FHCF has reduced the pricing power for private reinsurers. Many companies are therefore likely to see a decline

in revenues—perhaps as high as 10%-20%—in some cases. In fact, through the first quarter of 2007, some companies have experienced even larger declines of up to 40%.

Standard & Poor's expects that as Florida's reforms have contributed to declining property catastrophe reinsurance prices, compounded by the declining rates in other lines outside of property and locations outside of Florida, there is a greater likelihood that many companies will return capital to shareholders. However, most are sufficiently concerned about the potential severity of storms that they will wait until after the hurricane season. Standard & Poor's expects companies that aim to reduce their capital levels will also adjust exposure and risk proportionately while maintaining capitalization expectations required for the assigned rating.

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# Bermuda Class Of 2001: Five Years On



**T**he Class of 2001 has come through a turbulent time, with good results on the whole. The upcoming renewal season will be the most challenging yet, however, and will be the true test of these insurers' cycle management capabilities.

With 673 large loss events causing more than \$163 billion in insured losses, including the largest insured loss in history; corporate accounting scandals; hard markets in both casualty and property lines; and exponential premium growth, Bermudian (re)insurers have faced events that would have challenged most insurers over a 10- to 15-year period. In actuality, it was a five-year start-up period of heavy trials for the so-called Class of 2001.

The Class of 2001 has graduated (with distinction), with five of them at year-end 2006 ranking in the top 10 of Bermudian companies in terms of capital, and four in terms of premiums earned. But new tests await, as increasingly difficult market conditions challenge the ongoing transition of these entities from start-ups to mature companies. The ratings on this group have been generally stable, and positive momentum is building. Nevertheless, coming off a year of record earnings

and having passed the peak of the underwriting cycle, one should not be blinded by impressive results. It is necessary to understand the factors that could drive the ratings on the graduating Class over the next 12-24 months. These include an ability to demonstrate the efficacy of their enterprise risk management (ERM) processes, evidenced by strong cross-cycle earnings, and the articulation and execution of a clear strategic vision.

### The Story So Far

Aiming to exploit the capital displacement caused by the events of Sept. 11, 2001, and to capitalize on the resultant upturn in the pricing cycle, investors poured \$9 billion of funds into Bermuda to start (re)insurance companies late in 2001 and into 2002. The dislocation in the market during this time was unlike that seen after Hurricane Andrew in 1992. Virtually all lines of

business experienced a significant increase in demand, the resultant impact being exacerbated by the fact Sept 11 coincided with an already very weak premium rating environment.

Aside from the ability to help meet the sudden surge in demand for capacity, the Class of 2001 enjoyed a few advantages that would facilitate their success. The breadth of the dislocation provided the Class an opportunity to establish their credentials in a broad array of business lines. These new players were also able to attract top talent at the executive and underwriting levels who had years of experience in the market and were eager to go it alone. By either starting from scratch, or purchasing the renewal rights to existing books, the Class of 2001 effectively had a clean slate. The companies could focus on building a profitable platform unencumbered by legacy issues. This ultimately proved to be more beneficial than even they could have realized at the time, as many of their more traditional peers were subsequently saddled with material deteriorations on their U.S. casualty reserves for business written during the preceding soft cycle. With a majority of the start-ups beginning with capital in excess of \$1 billion, they were much larger than their Bermudian predecessors, but more nimble than their more established peers. Consequently, this new Class could move quickly to take advantage of technological advancements to build effective systems and processes for managing risk commensurate with the volatile market they had entered.

Strategies have since evolved as companies have sought to stake their claim in the growing Bermuda market. Although these companies had the ability to write primary and reinsurance business from the start, many initially focused on the reinsurance market, but as opportunities arose and the market firmed, most began to build out into different regions and lines of

business principally through organic growth. Geographic diversification became important as companies such as AXIS Specialty Ltd. (AXIS), Allied World Assurance Co. Ltd. (AWAC), Arch Capital Group Ltd. (ARCH), and Montpelier Re Ltd. expanded into the European market either directly or indirectly, principally through the provision of qualifying quota-share capacity to Lloyd's syndicates. Meanwhile, Aspen Insurance Ltd. sought to diversify its exposure away from the London market by accessing U.S.-based risk through its new underwriting team in Bermuda. There was a noticeable increase in casualty and specialty business written in 2003 as property rates began to soften. Platinum Underwriters, ARCH, and AWAC emerged as the casualty-heavy players, but the entire Class has a substantial portion of longer tailed exposure on their books. Companies also began to build out their direct insurance operations, with some eventually writing a majority of their book on a direct basis.

The efficacy of this diversification was tested in 2005 by hurricanes Katrina, Rita, and Wilma (KRW). Most had been able to avoid major losses in the catastrophe-laden years of 2003 and 2004 as the severity of these events was absorbed largely by primaries and government-sponsored funds. However, 2005 brought an unprecedented frequency of large events, causing an industry loss of about \$65 billion. Although strong earnings in the first half of 2005 helped to mitigate damage to many Class of 2001 players, losses of more than 30% of shareholders' equity were not uncommon. Though the Bermudians were hard hit, posting an average combined ratio of 126% and ROR of negative 14%, versus a global average combined ratio and ROR of 117% and negative 1.5%, respectively, each was able to pick itself up and dust itself off with the help of the capital markets.

After the storms, the Class was quickly able to

**Table 1:  
Class Of 2001: Standard & Poor's Ratings History**

Company	Initial Financial Strength Rating (Date)	Current Financial Strength Rating/Outlook
Allied World Assurance Co. Ltd.	A- (July 2006)	A-/Stable
Arch Capital Group Ltd.	A- (December 2005)	A/Stable
Aspen Insurance Ltd.	A (November 2002)	A/Stable
AXIS Specialty Ltd.	A (December 2002)	A/Positive
Endurance Specialty Insurance Ltd.	A- (May 2003)	A/Stable
Montpelier Re Ltd.	A- (July 2003)	A-/Negative
Platinum Underwriters	NR	NR
NR—Financial strength not rated.		

## Start-Ups

rebound as capital again flooded to the island. This capital inflow also helped create a new class of companies and emphasized the availability of alternative sources of capacity such as sidecars, bilateral collateralized quota-share agreements, and catastrophe bonds. Although new competition existed, the amount of capital raised did not fill the void in capacity and the property market began to firm up again. Results in 2006 proved to be some of the best on record for the reinsurance industry aided by a lack of major catastrophes and continued hardening in property rates, particularly in peak zones. The Class of 2001 had an average combined ratio and ROR of 84% and 28%, respectively, in 2006.

### Future Drivers

Recent upward movement in the ratings on some of the Class (Endurance Specialty Insurance Ltd., ARCH, and AXIS) has been the result of strong and steady earnings since inception, their ability to build and sustain strong competitive position through diversified platforms, and strong risk management practices. Standard & Poor's Ratings Services believes that the following are major rating factors that have helped to differentiate certain members of the Class from peers. Continued strength in these factors through the cycle will help to maintain higher ratings for these few, and could enable others in the Class to climb the ratings scale.

## The Class Of 2005: Facing A Far More Challenging Syllabus

Despite similarities surrounding the circumstances that gave rise to both the classes of 2001 and 2005, the freshmen are now confronted by several unique challenges:

- A more narrowly focused underwriting opportunity. The formation of the Class of 2001 coincided with a unique broad-based underwriting opportunity; the same cannot be said of the Class of 2005. The shortage of capacity was far more concentrated in the aftermath of KRW than it had been following Sept. 11. This provided the Class of 2001 with an unprecedented level of access to a broad array of quality business, enabling it to quickly build diversified portfolios organically.
- A more challenging underwriting environment. Sept. 11 precipitated a hard market; KRW delayed its demise. Consequently, the Class of 2001 benefited from a favorable underwriting environment throughout its formative years. In contrast, within 18 months of its formation, the Class of 2005 was confronted with a far more challenging underwriting environment. This leaves it little margin for error.
- Profitable deployment of surplus capital into a softening market. Capital management is an emerging theme throughout the reinsurance sector, but it poses a unique challenge to the recent start-ups. Most were endowed with \$1 billion upon formation, and have since added to this through retained earnings. While capital repatriation is currently being considered by many of the more established reinsurers, it is less of an option for the Class of 2005, whose clients, intermediaries, and other stakeholders often expect them to retain a *de minimus* level of capital in absolute terms. Hence, the challenge for the start-ups will be how to profitably deploy their surplus capital into a softening market. Access to quality business through organic growth is expected to be challenging as incumbents fight to retain their key accounts, and the execution risk posed to the Class of 2005 by the pursuit of a transformational acquisition at such an early stage of its development will be heightened substantially.

- Strong and steady earnings. This group has, for the most part, reported average combined ratios of 90%-95% and RORs of 11%-16% since 2002. An ability to sustain strong risk-adjusted earnings across the cycle will be critical.
- ERM practices. ERM has come to the forefront in our analysis over the past 18 months. ERM is of increasing significance to these players as the complexity of their business models continues to evolve. Standard & Poor's views the Class's ERM positively, with four of the seven companies' ERM assessed as at least strong (against the global average of 13% for (re)insurers). Most of the companies in this peer group have sophisticated economic capital models that are well integrated as part of the underwriting process. Our favorable view of this group's ERM practices partially addresses uncertainties caused by their short operating history. Nevertheless, as many of these ratings are currently supported by our appraisal of the companies' ERM capabilities, a revision of our view—for example, if cycle management proves to be inadequate—would likely place negative pressure on the ratings.
- Clearly articulated strategy and market position. Strategic vision and developing a clear-cut competitive profile is another area where these companies can distinguish themselves. They have shown the flexibility to capitalize on opportunities by reacting quickly to market dislocations and diversifying into new geographic regions and/or lines of business. Many of these companies' strategies involve focusing on profitability and not necessarily top-line growth. As the softening cycle continues, it will be important for management teams to continue to demonstrate their willingness to “walk the walk”.

The upcoming January renewal season will be the most challenging yet in the short history of the Class of 2001. It will be the first real opportunity for this group to demonstrate their cycle management capabilities and commitment to disciplined underwriting. Standard & Poor's believes these companies are well positioned to handle the soft market, but only time will tell.

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# Life Reinsurers May Feel The Squeeze As Cessions Shrink

**The life reinsurance sector is looking for ways to develop its business profitably, but regulatory measures and the increased availability of collateral have taken up some of the strain.**

The life reinsurance sector is now highly consolidated, with Swiss Re and Munich Re writing more than half of the global life reinsurance premiums and RGA standing out as one of the few remaining pure-play life reinsurers. The sector is enjoying improved new business profits, but lower reinsurance cession rates and slow growth might put the squeeze on profits prospectively. Meanwhile, risk management and careful risk selection will continue the stable trend for most of the leading companies in the sector.

Overall reinsurance market cessions have continued to shrink in the largest life reinsurance market—the U.S. According to the most recent Society of Actuaries (SOA) study, the cession rate (percentage of total life insurance risk reinsured) fell to 40% in 2006—much lower than the earlier part of the decade. Pricing is part of the issue, being higher now despite what has been a continued improvement in mortality for the population as a whole. There are several reasons for this. First of all, aggressive competition among reinsurers in the early part of the decade led to pricing that was irrationally low, but reinsurers have now come back to their senses. Second, reinsurers are tying up increasing amounts of their costs and capital in collateral to cover Triple-X reserves, and they have reflected this in pricing. Third, the reduction in reinsurer capacity due to consolidation and the redirection of capital by composite groups to non-life reinsurance means greater pricing power for the remaining reinsurers. This improved pricing power signifies far better profit margins on newer business, but this business is harder to come by.

Cedants are coping in a number of ways. Unable to pass the reinsurer price increases on in the competitive primary market, they must seek alternatives to maintain their own margins. One way is by simply retaining more. Whereas first-dollar original-terms coinsurance had been the norm for several years (for example, reinsuring 90% of every risk on every term life insurance policy sold), the market norm is now excess of retention (reinsuring 100% of all risk above a fixed retention of \$1 million or \$2 million per life). This means that the reserve strain on the retained risk can be substantial.

Nevertheless, increased availability of collateral sources has made this strain much easier to absorb. For the largest companies, this often means securitization of the excess reserve requirements, although

internal solutions became more prevalent in 2006. LOCs also remain an option. Most of the top 30 U.S. life insurers now have a captive reinsurer to accept their excess reserve needs, collateralized by LOCs. European banks in particular have been willing to provide that collateral, with five-, seven-, or even 10-year (or more) LOC facilities now available, whereas in the past a one-year LOC was the preferred route (although the mismatch of timing of assets and liabilities has made that option untenable to most).

Following the more recent acquisitions by Swiss Re (ERC) and SCOR (Revios), there have been seven significant life reinsurance acquisitions in the past decade. During that time, major names such as Lincoln Re, Allianz Life Re, and ING Re have also been removed from the map. There have been no major deals since those of Swiss Re and SCOR, and Standard & Poor's Ratings Services believes that this could mark an end of consolidation in the sector as there are few reinsurance players available for sale now. As a result of the consolidation, only five active companies had in-force market shares of 5% or more in the U.S. in 2006 (based on the SOA study). Certain names will always be rumored due to lack of a clear strategic fit with larger global groups or financial impairment, but no further scurries for the exit are likely.

It is interesting to note that even in the midst of all the turmoil associated with Scottish Re, it was not a sought-after target when it put itself up for sale, even at bargain prices. Following on the heels of troubled reinsurer Annuity and Life Re, the sector appears more volatile than a few years ago. Although Scottish Re's issues were partially the result of too many deals too quickly and Annuity and Life's Re's issues stemmed from organic growth, it would seem that life reinsurance has more operational risk associated with it than life insurance. Mortality risk—the driver of life reinsurance—is pretty predictable, with more than 100 years of actuarial research and millions of exposure years tracked and projected. Nevertheless, Scottish Re and Annuity and Life Re proved that the accumulation of more mortality exposure is not necessarily a “win-win” situation: it may not set the law of large numbers in motion if there are other issues such as contracts that are not iron clad (Annuity and Life Re), or accounting projection systems that are less than precise (Scottish Re).

With the current climate making growth difficult in

## Life Reinsurance

the U.S. as well as in the U.K.—another major life reinsurance market—companies are looking to new markets. Continental Europe is now seen as an attractive opportunity, with Solvency II-like supervision viewed as a key driver. Although the ultimate impact of Solvency II is not yet known, the expectation is that capital requirements will increase for many life insurance products, which will spur EU life insurers to use more reinsurance than today. More importantly, capital requirements under Solvency II are expected to encourage diversification of reinsurance programs, which up to now has been far less common on the continent than in the U.S. or the U.K. At the same time, many North American and other life reinsurers are actively looking at emerging opportunities in other European markets and the under-reinsured Asian market.

The major development in the U.K. has been the reduction in regulatory capital requirements for writing protection business. As the management of new business strain has been one of the main motivations for the high reinsurance utilization of protection lines in the U.K., Standard & Poor's expects that direct writers may increase their retention, in particular with regard to the mortality risk. As a result, there could be a material decrease in the premium income available to reinsurers. To compensate for this, Standard & Poor's expects that reinsurers will turn their attention to other risks, in particular longevity risk. In this respect, Swiss Re has already been particularly active in establishing itself as one of the major players in the longevity market, having been absent from the sector for a number of years. Swiss Re has already completed two major annuity reinsurance transactions in 2007, with Friends Provident (£1.7 billion of liabilities) and Zurich Financial Services (£3.9 billion of liabilities).

One of the biggest topics of interest for the sector recently has been the possibility of pandemic mortality. The most obvious risk that has received the greatest attention has been the H5N1 avian flu virus. Consensus among experts suggests that the risk of human-to-human transmission of H5N1 remains low, but given the potential impact on life reinsurer capital, contingency planning is necessary.

Standard & Poor's regularly reviews the latest research on the area of pandemic mortality and continues to be skeptical of some of the most severe scenarios. In particular, the U.S. government's strategic plan (released May 2006) for coping with a pandemic has a worst-case scenario of up to two million U.S. deaths, which most critics consider unlikely. In its assessment, Standard & Poor's has considered a worst case, using the 1918 influenza epidemic and other research as a basis, to be in the range of 30%-50% additional deaths in a one- to two-year period, or as many as 1.2 million additional deaths in the U.S. In our view, such a risk could be borne by most life insurers—particularly well-diversified ones—with only a moderate impairment to capital. As major epidemics like 1918 are few and far between, however, it is impossible to predict

with any certainty the impact a pandemic would have on the reinsurance sector. Although a pandemic is an extreme event, it is interesting to note that the insurance industry has been hit by two extreme events in the past six years—the 2001-2003 severe equity downturn and the 2005 hurricane season.

Life reinsurance specialists, particularly those who focus purely on mortality risk, would be the most at risk and could become financially impaired by a major pandemic—which could have an impact on the primary companies that rely on them. Despite the low likelihood, the significant severity of such an event means that preparation is advisable, and the capital markets have stepped up to make this possible. Swiss Re bought protection against extreme mortality events in its two Vita Capital transactions in 2003 and 2005. Scottish Re entered into a similar facility through Tartan Capital Ltd. in 2006. Such capital market transactions are likely to evolve further—particularly as market makers match up parties that are long on mortality exposure (life insurers and reinsurers) with those long on longevity (annuity providers). A vibrant market for insurance-related securitization is becoming a strong risk management tool for this sector. Meanwhile, the major reinsurers themselves are becoming much more comfortable with longevity risk as pricing has improved in recent years.

At Standard & Poor's 23rd annual insurance conference, held in June 2007 in New York, a panel of insurance and reinsurance executives agreed that an essential ingredient to future growth and profits in the reinsurance sector depends on building good relationships between reinsurers and customers. Like other industries, good relationships are extremely important in every aspect of business and especially important in the reinsurance sector.

A number of risks—within their products and in the competitive environment—will affect the life reinsurance sector in the future. The industry at large is strongly positioned to maintain financial strength, particularly given the improved profitability of recent new business and the diversity of capital-raising options. Further review will focus on whether increasing competition results in irrational pricing or whether lessons from the last cycle will keep the industry disciplined in 2007 and beyond.

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# Asia-Pacific Reinsurance Markets Remain Stable Despite Softening

**T**he Asia-Pacific region remains divided in terms of development, although the emerging markets' profitability may be more difficult to sustain given less technically driven pricing.

Standard & Poor's Ratings Services expects its ratings on global and domestic reinsurers operating in Asia-Pacific to remain stable, reflecting regional market growth, satisfactory underwriting results, and the improved capitalization of some regional players.

Reinsurance pricing diverges among markets in the region, from harder pricing in the more mature, technically driven markets such as Australia and Japan to soft pricing in markets driven more by the good recent profitability of cedants, such as China and Taiwan.

Australia and Japan are better developed, more disciplined, and more catastrophe-prone than the rest of Asia, hence the pursuance of harder pricing in both the primary and reinsurance markets.

For the rest of Asia, reinsurance pricing (except for catastrophe cover) is still softening, driven by profitable primary markets, strong competition, and adequate reinsurance capacity. Although new reinsurance capacity from start-up companies that have set up in the region and syndicates writing business in the Lloyd's insurance market has been seen in recent years, these mainly provide alternative choices for some specific product lines in the region. Domestic coinsurance, pooling, and major international reinsurance companies remain the major providers of mass-market reinsurance capacity. Regional reinsurers still mainly provide capacity to local markets, and are generally conservative underwriters.

The shape of the risk ceded to the reinsurance market has changed in recent years as, following global trends, some insurance companies in Asia-Pacific have tried to raise their retention limits or use excess-of-loss protection in order to capture more profits. Standard & Poor's views this as a supportive factor in contributing to insurers' bottom-line profitability.

## Australia/New Zealand

The Australian and New Zealand markets remain attractive for major global reinsurers, which retain an active presence through both subsidiary and branch status. While representing only a small percentage of total premiums globally, the Pacific markets provide

good geographic diversity from key European, U.S., and Japanese market risks, some countercyclical seasonal and weather pattern exposures, and access to a mature, well-managed primary market.

Most reinsurance is placed with major European and U.S.-owned players, with practically no indigenous Australian reinsurers remaining since some misjudged and mistimed forays in the mid-1990s. The exception to overseas ownership is the reinsurance operations of QBE Insurance Group Ltd.—although these do not specialize in taking Australian and New Zealand reinsurance risks—and the captive reinsurance operations of major non-life groups. Retention levels have increased as a result of the growth in size of market participants—in part through consolidation—and the utilization of captive reinsurers, and overall cessions to reinsurers have therefore reduced. In addition, foreign-owned insurers often utilize group reinsurance or leverage off group reinsurance programs, thereby reducing the available local premium pool. Some very large local programs remain, however, including that of the Earthquake Commission in New Zealand (NZ\$4.0 billion cover with a near NZ\$1.5 billion net retention) and Insurance Australia Group Ltd. (A\$3.5 billion cover with a near A\$200 million net retention). A growing premium pool is also emerging from quota-share coverage for small or start-up insurers, or new lines of business such as Internet-purchased life risk products.

Market conditions are generally competitive, with a softening in reinsurance rates. Non-life reinsurer net premium volumes reported by the Australian Prudential Regulation Authority (APRA) for the year ended March 31, 2007, had declined by 20.3% to A\$1.0 billion (including Australian branches), in part as a result of rate pressure, higher retention levels, and some evidence of stricter underwriting. The reinsurance sector constituted 4.7% of the total industry premium of A\$21.5 billion, compared with 6.0% the previous year. The sector remains profitable, however, with net profit after tax of A\$447 million (largely reported by



branch operations), and is well capitalized. The majority of premiums written and industry profitability is shared between the Swiss Re and Munich Re groups. Although A\$1.0 billion in net reinsurance premiums written are reported locally by APRA, the non-life sector cedes more than A\$7.4 billion in outward reinsurance, comprising largely intergroup reinsurance arrangements, as well as external reinsurance placed both locally and offshore.

The risk-sensitive regulatory incentives applied by APRA have set the Australian market apart from much of the rest of the world. Since insurers are required to allocate more capital to cede to lower rated reinsurers, higher rated reinsurers can achieve higher pricing for their better credit risk in the Australian market. As Solvency II takes hold in Europe, other markets will likely follow this practice.

### Japan/Korea

Japan is the second-largest insurance market in the world, but it has only one domestically incorporated reinsurer, Toa Re Co. Despite the company's competitive disadvantages with respect to major overseas peers in the glo-

bal reinsurance market, Toa Re has benefited from its strong historical ties, and continues to be the preferred reinsurance provider for most domestic primary insurers, especially for non-catastrophe-related risks.

Compared with the softening trend affecting the global industry, Japan's renewal saw only a relatively modest decrease in property insurance rates this year, primarily due to the country's large catastrophe risk exposure. One emerging trend among Japanese primary insurers has been an increasing interest in catastrophe bonds as an effective alternative to reinsurance.

Recently, two Japanese-sponsored catastrophe bond shelf programs linked to Japanese typhoon risks have been established: Fhu-Jin Ltd. (sponsored by Tokio Marine & Nichido Fire Insurance Co. Ltd.); and AKIBARE Ltd. (sponsored by Mitsui Sumitomo Insurance Co. Ltd.). More are expected to follow in coming years, and the increasing popularity of catastrophe bonds may affect the future reinsurance strategies of Japan's primary insurers.

Life reinsurance demand is still generally low in Japan. Given the recent rapid growth in variable annuities with guarantee benefits, however, life

reinsurance demand is expected to grow in line with the growing risks associated with guarantee benefits.

For Korea, non-life reinsurance rates and terms have generally softened for 2007, following the favorable financial results of primary insurance companies in 2006. The drop in premium rates for the primary market, especially in property business lines, mirrors the softening trend of the reinsurance market.

The operating performance of Korean Re Co., the dominant domestic player, is likely to remain similar in 2007 to the 2006 level. Primary market softening is a risk factor, but the booming stock market could increase Korean Re's investment performance. Despite the marginal expansion of foreign reinsurers in general lines, Korean Re maintains its dominant position in the region by leveraging its relationship with primary insurers and penetrating the life reinsurance segment.

Elsewhere, major primary insurers are aiming to increase their retentions on profitable contracts in non-life business, which may put some pressure on reinsurance companies going forward.

### The Rest Of Asia

Standard & Poor's expects that rates will continue to soften in the noncatastrophe reinsurance market, due to good underwriting results, new reinsurance capacity, and strong competition in the primary markets. Nevertheless, the operating performance of reinsurers in the region is still very favorable compared with that of international reinsurers, thanks to low reported catastrophe claims.

Most domestic reinsurers, such as Central Re Corp., Thai Re Public Co. Ltd., and China International Re Co. Ltd., reported combined ratios of 90%-100% in 2006. As most of the international reinsurers in the region operate as branches, their operating performance is consolidated for the group and not publicly disclosed. Nevertheless, it is expected that these international reinsurers' operating performance is also satisfactory, and is relatively stable compared with their global business performance.

The continued growth of developing markets such as China and India and some markets within the Association of Southeast Asian Nations (ASEAN) has attracted new reinsurance capacity, such as Lloyd's syndicates, new reinsurance start-up companies, and some international reinsurance players. This increased capacity is primarily used for some specific product lines. Reductions in premium rates in primary insurance are still largely due to low pricing discipline.

Nevertheless, some of the markets remain low in sensitivity to changes in the wider reinsurance cycle. Examples include China, due to its low cession rate, and Thailand, due to its low catastrophe exposure and the prevalence of tariff rates in a market generally lacking in sophisticated and experienced underwriting skills. The pricing in these markets is consistently soft from year to year compared with the other regional markets, while international reinsurers remain sup-

portive of these markets due to their strong top-line growth and low reported catastrophe claims. Reinsurers in the Chinese market may experience deterioration in underwriting performance over the long term, however, as a result of possible changes in claims patterns due to continued urbanization and the market's current underpricing.

Reinsurers' performance in the rest of Asia is expected to remain satisfactory, with the average combined ratio for the region not exceeding 100%. It is likely, however, that performance will deteriorate over the medium term if the market continues to soften.

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# Reinsurance In Latin America, Especially Brazil, Shows Growth Potential

**The reinsurance sector in Latin America will be boosted by the development of the Brazilian market, and the change in regulations will have significant consequences for the current players.**

Based on good growth prospects and the still-low penetration within the economy, the reinsurance business shows signs of improvement in Latin America. With gradual moves to more stable economic environments in dominant Latin American countries, we expect the development of more sophisticated insurance products within the reinsurance market. The robust reinsurance market has been a key factor behind the sound development of the insurance industry. In Mexico, Argentina, and Brazil, the perspectives for reinsurance are good. Brazil has the largest insurance market in Latin America, but lags the other countries in the reinsurance segment.

## **Brazil**

The opening up of the reinsurance market in Brazil should speed up growth in the insurance industry overall. Over time, it should help bring the industry further in line with other segments of the Brazilian economy that have gradually become more open. The open reinsurance market is likely to usher new investments and technology into this country's insurance industry, along with sharper product diversification and stronger incentives to compete. Standard & Poor's Ratings Services expects several changes in the way the industry operates, including refinement of the criteria by which local insurers select the reinsurers with whom they will work. Requirements for financial transparency should also improve. Reinsurers entering the market will closely inspect local insurers. And, insurers will scrutinize the operations and contracts of reinsurers, with a keen interest in reinsurers' solvency.

Years of debate about whether (and how) to open up the reinsurance market in Brazil culminated in the approval of Law 126 on Jan. 15, 2007. Although the

state reinsurance monopoly, IRB Brasil Resseguros S.A. (IRB), was not privatized, the opening up of the market is good news for the industry. While IRB already allows insurers to use foreign reinsurers for specific contracts, until now IRB had to approve these deals, which, in practice, has inhibited the use of international counterparties. Given the enormous potential of Brazil's insurance industry, several foreign reinsurers have been anxiously awaiting the opening up of the market through the long delay.

Brazil is among the last countries in the region to end its reinsurance monopoly. This puts it far behind other important Latin American insurance markets, such as Chile's or Mexico's, which opened up their reinsurance markets long ago. The only remaining countries in Latin America with monopolies are Costa Rica and Cuba.

IRB has operated as a reinsurance monopoly since its founding in 1939. Despite unceasing debate during the past three decades about opening the market, the government-controlled company is still the sole provider of reinsurance in Brazil, at least through 2007. The Brazilian National Insurance Council (Conselho Nacional de Seguros Privados) is slated to issue new rules in addition to Law 126 that establish the framework for reinsurance operations in Brazil.

Law 126 will have far-reaching effects on the reinsurance segment. At the start, IRB's historical role as regulator of the reinsurance market will be transferred to the current insurance industry regulator, the Superintendence of Private Insurance (SUSEP). Both SUSEP and IRB must adapt to the new environment. To date, SUSEP has not had jurisdiction over the reinsurance segment and will have to grow into its role. Perhaps the greater challenge is IRB's.





The former monopoly will evolve to resemble its new foreign competitors, focusing on relationship management, internal systems, risk management, human resources, and competitive pricing.

According to Law 126, the new regulatory body will recognize three categories of reinsurer:

- Local reinsurer: a reinsurer domiciled in Brazil and exclusively carrying reinsurance and retrocession;
- Admitted reinsurer: a reinsurer domiciled in a foreign country, with a representative office in Brazil; and
- Occasional reinsurer: a reinsurer domiciled in a foreign country, with no representative office in Brazil.

Under Law 126, IRB and other local reinsurance companies will have preference over foreign-domiciled companies. Initially, all Brazilian insurers will be required to cede at least 60% of their reinsurable business with local reinsurers. Three years after

the law goes into effect, this limit will decrease to 40%. After another three years, the limit will be reviewed.

The newly expanded regulatory body, SUSEP, will enforce strict rules for doing business with foreign-domiciled reinsurers. Occasional reinsurers cannot be domiciled in tax havens, in countries where the income tax is below 20%, or in countries that restrict access to the names of shareholders or company owners. Law 126 also provides that only local reinsurers can reinsure endowment insurances and supplementary pension plans.

A bevy of details remains to be hammered out before SUSEP publishes the new rules, scheduled sometime in 2007. These include limits and conditions for retrocession, preferences for admitted reinsurers over occasional reinsurers, conditions under which local reinsurers are treated like admitted and occasional reinsurers, and operating rules for reinsurers and reinsurance brokers.

### An open reinsurance market should boost growth throughout the industry in Brazil

Although insurance premiums have climbed steadily during the past four years, the Brazilian insurance market remains largely untapped. At year-end 2006, Brazil's insurance industry accounted for just 0.6% of global premiums, and its total revenues were just 3% of GDP. We believe the industry continues to offer good growth prospects for the medium and long term. Among the main factors limiting insurance penetration in Brazil are the country's relatively low income per capita and its high level of income inequality, though both are expected to improve given economic growth and shrinking unemployment. We consider that the monopoly of the reinsurance market limited the industry's growth, and the pending de facto demise of that monopoly is the main reason we expect the industry to expand during the next several years.

Although Brazil is Latin America's largest insurance market in terms of premiums written, it is one of the least developed in terms of reinsurance revenues. The reinsurance monopoly has been a leading factor in keeping the reinsurance rate low as well as the composition of the business portfolio in Brazil, in which there is a strong auto insurance component (normally a full-retention business) and no significant need for catastrophe insurance.

IRB achieved total gross premiums written of Brazilian reais 3.4 billion (approximately \$1.45 billion) for the fiscal year ended December 2006. Total reinsurance premiums should keep growing because of increased insurance business and new reinsurance operations as the market opens. Some market estimates indicate reinsurance premiums could reach some \$2 billion in the next two to three years. We expect IRB to adapt to the new rules and market conditions, remaining a significant player in the market. IRB benefits from its long-term relationship with local insurance companies and its knowledge of the domestic market. The company should invest in staff development, internal systems, and risk management to compete with private-sector companies.

The final form of the pending reinsurance legislation will shape the future of Brazil's insurance market and will have serious consequences for the long-term survival of current players. The regulations will most likely require companies to keep minimum retention levels. This requirement would eliminate the long-standing practice, common among small carriers operating mainly as insurance brokers, of ceding nearly all of their risk to the reinsurer monopoly. With such practices no longer permitted, the proposed retention requirements could force some insurers with weak capitalization and limited financial flexibility out of the market.

### Mexico

As the second-largest market in Latin America, with \$15 billion in premiums written, the Mexican insur-

ance sector shows good growth prospects, particularly if we consider its still-low penetration within the Mexican economy. At year-end 2006, premiums written accounted for 1.8% of GDP, and 2% is an historical hurdle percentage for Mexico's insurance market. The stable economic environment with low inflation rates will contribute to the insurance industry's growth and the development of more sophisticated insurance products. The quality of reinsurers operating in Mexico is good, as local regulation encourages insurance companies to negotiate reinsurance contracts with local reinsurers and foreign reinsurers with a minimum rating requirement. Only two companies are established in Mexico as professional reinsurers—QBE del Istmo Mexico and Reaseguradora Patria. By year-end 2006, reinsurance utilization in non-life premiums (without considering the auto line of business) accounted for 64.3%, and life premiums accounted for 3.4%. Life premiums account for 43% of total premiums written, and non-life premiums (without auto insurance) represent 18%.

### Argentina

In Argentina, despite significant recovery of all lines of insurance businesses in the past four years, total premiums written reached roughly \$3.5 billion, pointing to the still relatively small size of the local market. Growth potential, however, remains high, as the still-low penetration among the population (total premiums written in 2006 accounted for 1.6% of GDP), in combination with favorable economic prospects, encourages expansion in the medium to long term. Moreover, the outlook on the financial strength of local insurers has improved significantly after the normalization of operations that followed the 2002 economic and financial crisis. A moderate ROR at 6.5% (in the past fiscal year) is good news for a market that has not been used to posting in the black for very long. In this context, the perception of global reinsurers in the local market has continued to improve. After a couple of years with limited reinsurance options in the aftermath of Argentina's crisis, local insurers are now benefiting from a more competitive reinsurance supply.

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- Likelihood of payment capacity and willingness of the insurer to meet its financial commitment on an obligation in accordance with the terms of the obligation;
- Nature of and provisions of the obligations; and
- Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

# Insurer Financial Strength Ratings

**An insurer rated 'BBB' or higher is regarded as having financial security characteristics that outweigh any vulnerabilities, and is highly likely to have the ability to meet financial commitments.**

### AAA

An insurer rated 'AAA' has EXTREMELY STRONG financial security characteristics. 'AAA' is the highest Insurer Financial Strength Rating assigned by Standard & Poor's.

### AA

An insurer rated 'AA' has VERY STRONG financial security characteristics, differing only slightly from those rated higher.

### A

An insurer rated 'A' has STRONG financial security characteristics, but is somewhat more likely to be affected by adverse business conditions than are insurers with higher ratings.

### BBB

An insurer rated 'BBB' has GOOD financial security characteristics, but is more likely to be affected by adverse business conditions than are higher rated insurers.

**An insurer rated 'BB' or lower is regarded as having vulnerable characteristics that may outweigh its strengths. 'BB' indicates the least degree of vulnerability within the range; 'CC' the highest.**

### BB

An insurer rated 'BB' has MARGINAL financial security characteristics. Positive attributes exist, but adverse business conditions could lead to insufficient ability to meet financial commitments.

### B

An insurer rated 'B' has WEAK financial security characteristics. Adverse business conditions will likely impair its ability to meet financial commitments.

### CCC

An insurer rated 'CCC' has VERY WEAK financial security characteristics, and is dependent on favorable business conditions to meet financial commitments.

### CC

An insurer rated 'CC' has EXTREMELY WEAK financial security characteristics and is likely not to meet some of its financial commitments.

### R

An insurer rated 'R' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision, the regulators may have the power to favor one class of obligations over others or pay some obligations and not others. The rating does not apply to insurers subject only to nonfinancial actions such as market conduct violations.

### NR

An insurer designated 'NR' is NOT RATED, which implies no opinion about the insurer's financial security.

### Plus (+) or minus (-)

Ratings from 'AA' to 'CCC' may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

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**National Scale Ratings**, denoted with a prefix such as 'mx' (Mexico) or 'ra' (Argentina), assess an insurer's financial security relative to other insurers in its home market.

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