Special Comment

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Terrorism Risk Remains Material for Insurers as TRIA Expiration Looms

Summary Opinion

Following the enactment of the Terrorism Risk Insurance Act of 2002 ("TRIA" or the "Act"), in November 2002, Moody's conducted a survey of commercial lines primary insurance carriers to discuss the implementation of Act and get a sense for how companies were assessing, pricing and managing terrorism risk. Moody's published its findings in a May 2003 Special Comment entitled "Moody's Surveys Insurers on the Implementation of Terrorism Insurance Act."

With the benefit of two additional years of operating under the requirements of TRIA, Moody's recently conducted a follow-up survey of commercial lines insurers to determine if companies had changed their approach to managing terrorism risk. In the absence of legislative action, the fact that TRIA is set to expire at year-end 2005 introduces additional complexity to insurers' risk management efforts because exposures currently being underwritten would no longer benefit from the Federal backstop, which provides up to $100 billion of reinsurance for losses arising from terrorism caused by foreign terrorists.

The comments that follow reflect Moody's understanding of how insurers are currently dealing with terrorism risk based on our survey and related interviews of commercial lines insurers representing nearly 60% of industry subject commercial lines direct premiums.

- As expected, take-up rates for terrorism insurance by insurance buyers vary widely based on the profile of the risk in question (large commercial vs. small commercial, property vs. liability, etc.) However, by and large, companies are reporting surprisingly high take-up rates, driven by lower terrorism premium surcharges and the fact that many companies are providing terrorism coverage to small commercial accounts at no charge.
- TRIA does not require coverage to be provided for losses arising from nuclear, biological, chemical or radiological ("NBCR") events or non-certified terrorist events ("NCT" - e.g. domestic terrorism). However, many insurers are providing coverage for biological, chemical, radiological events and NCT - while nuclear exclusions remain the rule, not the exception.
- Insurers typically utilize third-party probabilistic and deterministic models to assess terrorism exposures, though insurers remain cautious in their use of these tools. Like most insurers' approach to natural catastrophe risks, individual risk selection and keeping aggregate exposures in check remain the primary underwriting tools used to manage terrorism exposures.
- Insurers' pricing philosophies vary widely, but typically depend on the type of risk in question. Premium surcharges can be based on ISO loss costs (typically admitted carriers) or proprietary rating models based on a number of factors (typically specialty risks and excess and surplus lines carriers). For workers' compensation coverages, companies are typically using the NCCI certified terrorism charge or rates from other independent bureaus.

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- Almost universally, companies are not purchasing private reinsurance specifically for terrorism losses in their TRIA retention layer. This is potentially troubling because in some instances, insurers' deductibles already represent a meaningful portion of their statutory capital - and proposed TRIA extension legislation would further increase deductibles to 20% of direct premiums earned in 2007 from 15% during 2005. Moody's notes that for the top 5 U.S. commercial lines insurers, the average 2005 deductible equates to more 20% of statutory capital on a pre-tax basis.
- Most insurers are obtaining some reinsurance coverage from private reinsurers for terrorism losses under their property reinsurance or casualty reinsurance treaties, though coverage is typically limited to NCT. NBCR coverage is almost universally excluded.
- Where state insurance regulators have allowed, many insurers are currently writing policies that contain "pop-up" conditional exclusions for terrorism losses in the event that TRIA is not extended on either a universal or case-by-case basis (e.g. accounts with high perceived risk). A significant number of insurers, on the other hand, are taking a "wait and see" approach that will continue to cover terrorism risk until the expiration of the policy in 2006.
- Only a handful of insurers are offering "stand-alone" terrorism policies (e.g. terrorism coverage without an underlying P&C policy) with limits up to $100 million or more. However, capacity remains tight and is subject to the aggregate risk limits of the companies providing such coverage.

Terrorism Risk Remains a Material Ratings Concern

- The results of our survey indicate that while many commercial lines carriers have made significant progress in quantifying their potential terrorism risk exposures during the past two years, some companies appear not to have an adequate grasp of their assumed risks and potential liabilities.
- In the absence of TRIA, it is likely that widespread terrorism exclusions will again become the norm for commercial lines policies. However, terrorism coverage for workers' compensation is mandatory, and certain states require property insurance policies to provide coverage for all fire losses, including those arising from terrorist events. In Moody's opinion, private reinsurers are unlikely to fill the reinsurance capacity void if TRIA expires - at least in the near term. Consequently, many insurance carriers - particularly large workers' compensation writers - could be faced with dangerously high levels of risk aggregation unless these companies substantially reduce their exposure to large accounts.
- Given the fact that TRIA deductibles can represent a significant portion of a company's statutory capital, and will increase even further under current TRIA extension proposals, it isn't clear that an extended TRIA program actually provides meaningful benefit to insurers except for "solvency protection" in the most extreme terrorist attack scenarios.

Impact of Terrorism Risk on Ratings

- In general, terrorism events that impact the insurance industry widely and result in losses of less than 10% of an insurer's equity capital are not likely to have a ratings impact, unless they augur a change in the industry's risk profile or result in further disruption to financial markets more broadly.
- Companies that have more aggressive risk postures with respect to terrorism could see more pronounced rating declines than their more conservative peers in the event of a severe loss.
- Moody's expects highly-rated commercial lines insurers to appropriately manage terrorism risk through policy exclusions (where available), limitations on aggregate exposures and through the use of risk transfer/ pooling mechanisms.

9/11 Terrorist Attacks Demonstrate Financial Risks of Terrorism to Insurance Industry

It is estimated that the terrorist attacks of September 11, 2001, which resulted in over 3,000 deaths, caused in excess of $30 billion of insured losses and an additional tens of billions of dollars in economic losses.

Having absorbed over half of the insured losses, reinsurers quickly moved to exclude terrorism as a covered peril for policies incepting after 9/11. Likewise, primary insurers reduced their potential exposure through a variety of measures, including exclusions or sub-limits for terrorism and walking away from certain high-profile risks. Urged on by business groups and insurance executives, Congress passed TRIA in November 2002, providing a temporary risk-sharing mechanism among the Federal government, insurers and insurance policyholders for insured losses arising from terrorist events. Having spent the better part of 2002 running away from terrorism risk, P&C insurers found themselves in the somewhat ambivalent position of being forced back into the business of writing terrorism insurance.

TRIA Expiration Looms; Congressional Debate to Follow Release of Treasury Report

When TRIA was enacted in November 2002, the fact that the Act was only temporary and would expire at year-end 2005 was the least of insurers' worries. More pressing was the need to fully comply with the provisions of the Act, which required insurers to notify policyholders of the availability of terrorism coverage as well as the associated premium surcharges within 90 days. For larger insurers, compliance with the Act was a Herculean task, requiring hundreds of thousands of premium notices to be sent to policyholders. As a result, premium rating plans for terrorism risk were often hastily drawn up and filed with state regulators for adjustment at a later date.

Two years later, insurers have largely refined their approach to terrorism from a policy administration and pricing standpoint. However, little has been done in the industry to create alternative methods to transfer terrorism risk in the absence of TRIA. Consequently, insurance companies have been vocal in their desire to see TRIA extended through Federal legislation. During September 2004, the House Financial Services Committee approved H.R. 4634, the Terrorism Backstop Insurance Act of 2004, which proposed to extend TRIA through year-end 2007. However, the legislation failed to gain traction in the weeks leading up to the November 2004 elections.

The Act included a provision that requires the Treasury Department to issue a report on the effectiveness of TRIA and the likely capacity of the property and casualty insurance industry to offer insurance for terrorism risk following the expiration of TRIA, as well as the likely availability and affordability of terrorism insurance. The report is due by June 30, 2005. It is widely believed that Congressional action, if any, will occur after the Treasury report has been released.

Moody's 2005 Terrorism Risk Survey

Moody's recently surveyed a diverse group of primary commercial lines carriers to determine how insurers were approaching the risk management challenges presented by terrorism risk. We questioned companies about take-up rates of insureds by line of business, whether they excluded NBCR and NCT coverage from policies, the analytical approaches used in assessing terrorism exposures, the largest aggregate exposures by geographic region and in major U.S. cities, their approach to pricing terrorism coverage, their reinsurance coverage profile, use of "pop-up" conditional exclusions in the event TRIA is not extended and their willingness to write stand-alone terrorism insurance policies.

Take-Up Rates for Terrorism Coverage

Based on the results of Moody's survey, take-up rates for terrorism coverage have increased significantly since 2003 and are at levels we consider to be surprisingly high. For standard commercial lines carriers with large and middle-market clients, the take-up rate is generally between 70% to 95% in both property and liability lines for companies we surveyed, though some carriers reported rates of just 20% to 35%. Both national and regional carriers are reporting small commercial take-up rates of between 90%-100%. The high take-up rates in small commercial are driven by the fact that coverage is typically provided for a nominal fee, or in many instances, for free. Specialty and excess & surplus lines writers reported the lowest take-up rates - at levels between 10% and 35%. Moody's believes these companies are pricing coverage based on the risk profile of the underlying risk in question, rather than using modest across the board surcharges, which are typically used for most standard commercial lines policies.

Coverage for NBCR and NCT

Due to state law requirements, all workers' compensation policies implicitly include coverage for losses stemming from NBCR and NCT events. For other property and liability policies, most companies are providing coverage for terrorism losses caused by the release of biological, chemical and radiological agents and NCT for between 70% and 100% of their customers - though nearly all companies continue to exclude nuclear losses. Specialty and E&S writers were most likely to have universal NBCR and NCT exclusions.

Analytical Approaches Used to Assess Terrorism Risk Exposures

Most companies we surveyed utilize one or more of the probabilistic and deterministic terrorism risk models developed by specialist modeling firms such as AIR, EQECAT and RMS - and some companies have developed internal models to supplement their analysis. Most companies also use an aggregation of policy limits analysis by zip code or city to assess their aggregate terrorism exposures - particularly for workers' compensation. The outputs of these analyses are typically used to restrict writings in areas where terrorism risk aggregations have become an issue. Personal lines carriers with "main street" small commercial risk portfolios appear to be devoting the least amount of resource to risk assessment, and in some instances, do no modeling at all - presumably due to the fact that policy limits are low and are typically located in small towns in rural or suburban environments.

Approaches Used to Price Terrorism Risk

The approaches used to price terrorism risk insurance coverage vary widely. In general, we find that most companies price coverage at levels that encourage policyholders to buy coverage - which is consistent with the basic tenet of insurance - to spread losses across a broad, diversified pool of customers. Workers' compensation policies typically carry a surcharge based on NCCI certified terrorism charges or factors from other independent bureaus. Carriers with small commercial portfolios typically use ISO loss costs, nominal policy surcharges or provide coverage for free. Standard commercial lines policies for large and middle market accounts are more likely to be individually rated using proprietary rating models, but many carriers rely on ISO loss costs. Specialty and E&S writers generally have the highest policy surcharges - a factor which undoubtedly contributes to the lower take-up rates for this sector.

Utilization of Private Market Reinsurance

Almost universally, private market reinsurance is not being utilized to cover terrorism risk below companies' TRIA deductibles. The insurers we surveyed noted that while this type of coverage was available, high prices were an impediment to greater reinsurance utilization. However, most companies we surveyed do have some reinsurance protection available under their property or casualty reinsurance treaties with private market reinsurers - particularly for NCT losses (NBCR coverage is typically excluded). Consistent with our 2003 survey, Moody's would still characterize the proportion of terrorism risk being shifted from primary insurers to private market reinsurers as low.

Use of Conditional Exclusions in the Event TRIA is not Extended

For policies written during 2005, approximately one-third of the insurers we surveyed are using conditional terrorism exclusions, where allowed, in the event TRIA is not extended. The majority of companies, on the other hand, generally plan to continue covering terrorism risk until policies expire - though in some instances, companies plan to use a case-by-case approach to exclusions; particularly for accounts deemed to be "high risk". Other companies told us they have begun to selectively non-renew certain accounts to reduce their terrorism risk exposure in the event TRIA is not extended.

Stand-Alone Terrorism Coverage

Only a handful of companies we surveyed offer stand-alone terrorism policies (e.g. terrorism coverage without an underlying P&C policy), with limits up to $100 million or more. Product offerings include coverages that are not typically offered by most commercial lines carriers, such as NBCR. While stand-alone capacity has increased and pricing has come down in recent years, Moody's would still characterize stand-alone terrorism insurance supply as fairly limited - since companies offering these coverages adhere to strict aggregation limits.

Modeling Terrorism Risk

Several independent modeling firms with prior experience in modeling natural catastrophes - including AIR, EQECAT and RMS - have developed products to help insurers quantify their terrorism risk. This is a difficult endeavor because of the relative lack of statistical data on the frequency and cost of acts of terrorism. Unlike natural catastrophes, terrorists consciously seek to maximize financial damage and human harm. In spite of these obstacles, modeling firms have been able to add some creativity to their technical expertise in order to formulate terrorism risk methodologies.

There are typically two initial parts to calculating loss curves from an attack: (i) determining the types of attacks a terrorist could mount (e.g., truck bombs, chemical damage, etc.) and (ii) assembling a list of likely terrorist targets. The attack lists and target databases have been compiled with the help of intelligence and military experts. Using blast analysis and engineering work, loss curves are calculated for each possible event.

Terrorism experts have been consulted and polled to estimate the relative desirability of specific terrorism events. These rankings, along with estimates for the expected number of annual attacks, have been used to generate probabilities for each event. The frequency estimates and loss curves for each event yield an expected loss curve for that event. When exposure risks are calculated for an insurer, the insurer's entire portfolio is overlaid onto the loss curves for each event to determine the insurer's exposure across all business lines, allowing it to identify its largest terrorism exposures. Insurers can also estimate their overall expected and worst-case losses from terrorism with the aid of these loss curves. Moody's views the models as potentially useful exposure management tools, though they seem better equipped to estimate loss severity given an event than they are at estimating loss frequency.

In Absence of TRIA, Workers' Compensation Poses Largest Threat; Fire-Following Requirements also a Concern for Property Policies in Certain States

Based on estimates from a leading catastrophe modeling firm, it is possible that insured losses arising from the detonation of a nuclear device or the release of biological, chemical or radiological agents could exceed $250 billion. Given the potential for such an extreme loss, in the event TRIA is not extended, many primary insurance carriers will likely restrict terrorism coverage for accounts perceived to be high-risk in nature through policy exclusions. Indeed, many of the companies we surveyed have begun to prepare for TRIA's potential expiration through conditional exclusions for policies written during 2005. However, for workers' compensation, terrorism coverage is mandatory. Some states, including New York, Illinois and California, require property insurance policies to provide coverage for fire losses regardless of the cause of such losses ("fire-following"). Companies writing workers' compensation and property in fire-following states cannot exclude terrorism and are presented with additional risk management challenges.

While there are good arguments on both sides of the TRIA extension debate, Moody's believes that TRIA is valuable to insurance industry creditors in that it provides some form of "solvency protection" for insurers in the most dire terrorist attack scenarios (e.g. NBCR). Moreover, in the absence of TRIA, Moody's believes private reinsurers are unlikely to fill to void left by the Federal government, at least in the near term. Therefore, many insurance carriers - particularly those writing workers' compensation - could be faced with dangerously high levels of risk aggregation unless those companies substantially reduce their exposure to large accounts, especially in urban centers. Some risk would likely flow to state workers' compensation residual markets. However, Moody's believes it will be difficult for many carriers to sufficiently scale back their workers' compensation exposures, leaving the largest carriers particularly at risk.

Table 1

2004 Workers' Compensation Direct Premiums Written ($ Mil.)

Rank	Company/Group	Moody's IFSR of Lead Company [3]	Moody's Rating Outlook [3]	2004 Direct Premiums Written	% Market Share
1	State Compensation Insurance Fund of CA	Not Rated		$8,151	15.5%
2	American International Group	Aa2	Review for Downgrade	$5,687	10.8%
3	Liberty Mutual Group	A2	Negative	$4,723	9.0%
4	St. Paul Travelers Group	Aa3	Negative	$3,045	5.8%
5	Zurich Insurance Company Group	Not Rated		$2,428	4.6%
6	Hartford Insurance Group	Aa3	Stable	$2,144	4.1%
7	Ohio Bureau of Workers' Compensation [1]	Not Rated		$1,744	3.3%
8	New York State Insurance Fund [2]	Not Rated		$1,435	2.7%
9	C N A Insurance Companies	A3	Negative	$1,369	2.6%
10	Zenith Insurance Group	Baa1	Stable	$1,072	2.0%
11	Chubb Group	Aa2	Negative	$867	1.6%
12	Texas Mutual Insurance Company	Not Rated		$714	1.4%
13	WR Berkley Group	A2	Stable	$667	1.3%
14	Everest Re Group	Aa3	Stable	$648	1.2%
15	Accident Fund Insurance Company of America	Not Rated		$520	1.0%
	Estimated Total Industry			$52,679	

Source: Company Reports, National Underwriter Insurance Data Services, Moody's Estimates
[1] FY 2004 Net Premiums Earned
[2] 2003 Net Premiums Earned
[3] Moody's Rating as of June 3, 2005

Group Life and BOLI/COLI an Issue for Some Life Insurance Companies

On the life insurance side, Moody's notes that some life companies may have elevated exposure to terrorism risk in their group life and/or bank/corporate-owned life insurance operations (BOLI/COLI), which can include significant clustering of insured lives in urban centers. While the Treasury Department conducted a study into the possibility of extending coverage to group life insurance under TRIA, it was determined that there was not an appreciable reduction in the availability of group life insurance for consumers - although the Treasury Department did find a lack of catastrophic reinsurance for insurers that offer group life coverage.

Since the 9/11 tragedy, providers of both group and individual life insurance have been tracking their exposures more closely, by contract, zip code, and by building. In a few known instances, providers have chosen not to renew group coverages, given the lack of affordable catastrophe reinsurance for a particularly significant group concentration.

In general, Moody's believes that most life insurers have sufficient geographic diversification in their portfolios to mitigate terrorism risk. However, for companies where group life and/or BOLI/COLI business continues to represent a significant source of profits, the threat posed by terrorism risk could result in incremental negative pressure on ratings.

Analyzing an Insurer's Terrorism Risk

Terrorism risk presents a host of challenges when one is analyzing the financial strength of insurance companies. In general, Moody's views terrorism risk like other catastrophe risks faced by insurance companies. However, given the inherent difficulties in modeling terrorism risk and the general lack of substantive public disclosure related to terrorism exposures by insurance companies, Moody's takes a cautious approach to terrorism risk. As a result, Moody's typically compares gross terrorism exposure and net terrorism risk retention under private market reinsurance treaties or TRIA to a company's surplus and capital. In most cases, the net retention is essentially equivalent to a company's TRIA retention (15% of direct premiums written for subject lines of business for 2005 as a deductible plus 10% co-participation) - since NBCR events are typically excluded under private market property and/or casualty reinsurance treaties.

TRIA Deductibles Can be Formidable

As can be seen in Table 2 in the Appendix, the 2005 TRIA deductible for many carriers can represent a meaningful portion of their statutory capital. And with proposed TRIA extension legislation increasing the deductible to 20% of direct premiums in 2007, risk exposures as a percentage of surplus will increase even further. Moody's notes that for the top 5 U.S. commercial lines insurers, the average 2005 TRIA deductible equates to more than 20% of statutory capital on a pre-tax basis. To be sure, some U.S. insurance groups are part of larger global financial services organizations that could provide additional financial resources if necessary. However, it is unclear to what extent affected industry participants would be able to adequately recapitalize in the event of another major terrorist attack.

Impact of Terrorism Risk on Ratings

In general, terrorism events that impact the insurance industry widely and result in losses of less than 10% of an insurer's equity capital are not likely to have a ratings impact, unless they augur a change in the industry's risk profile or result in further disruption to financial markets more broadly. Companies that have more aggressive risk postures with respect to terrorism could see more pronounced rating declines than their more conservative peers in the event of a severe loss. Moody's expects highly-rated commercial lines insurers to appropriately manage terrorism risk through policy exclusions (where available), limitations on aggregate exposures and through the use of risk transfer/pooling mechanisms.

Related Research

Special Comments:

P&C Insurers and the Terrorism Risk Insurance Act of 2002: Be Careful What You Wish For, November 2002 (76687)

Moody's Surveys Insurers on Implementation of Terrorism Insurance Act, May 2003 (78134)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

APPENDIX:

Table 2

Top 25 U.S. Commercial Lines Insurance Companies ($ Mil.)

Rank by DPW	Company/Group	Moody's IFSR of Lead Company [3]	Moody's Rating Outlook [3]	2004 DPW in Subject Commercial Lines	Estimated Market Share	2004 Policyholder Surplus	Estimated 2005 TRIA Deductible [1]	2005 TRIA Deductible as % 2004 PHS
1	American International Group [2]	Aa2	Review for Downgrade	$25,673	12.6%	$16,693	$3,851	23.1%
2	St. Paul Travelers Group	Aa3	Negative	$16,007	7.8%	$14,416	$2,401	16.7%
3	Zurich Insurance Company Group	Not Rated		$12,095	5.9%	$4,925	$1,814	36.8%
4	Liberty Mutual Group	A2	Negative	$9,697	4.7%	$8,739	$1,455	16.6%
5	C N A Insurance Companies	A3	Negative	$7,695	3.8%	$6,815	$1,154	16.9%
6	Hartford Fire Group	Aa3	Stable	$7,609	3.7%	$11,022	$1,141	10.4%
7	Chubb Group	Aa2	Negative	$7,593	3.7%	$7,764	$1,139	14.7%
8	ACE USA	A2	Review for Downgrade	$6,305	3.1%	$2,300	$946	41.1%
9	Nationwide Mutual Group	Aa3	Stable	$4,126	2.0%	$9,180	$619	6.7%
10	State Farm Mutual Group	Aa1	Stable	$3,823	1.9%	$46,308	$573	1.2%
11	Fireman's Fund Group	A2	Stable	$3,238	1.6%	$2,930	$486	16.6%
12	Great American Insurance Group	A3	Stable	$3,075	1.5%	$2,071	$461	22.3%
13	WR Berkley Group	A2	Stable	$3,070	1.5%	$2,424	$461	19.0%
14	XL Reinsurance America & Affiliates	Aa3	Negative	$2,745	1.3%	$1,778	$412	23.2%
15	FM Global	Not Rated		$2,537	1.2%	$3,700	$381	10.3%
16	Farmers Insurance Group	A3	Stable	$2,266	1.1%	$4,146	$340	8.2%
17	Cincinnati Insurance Companies	Aa3	Stable	$2,218	1.1%	$4,196	$333	7.9%
18	Safeco Group	A1	Stable	$2,062	1.0%	$3,431	$309	9.0%
19	National Indemnity Company Group	Aaa	Stable	$2,044	1.0%	$48,486	$307	0.6%
20	Auto-Owners Group	Not Rated		$1,955	1.0%	$3,520	$293	8.3%
21	Old Republic Group	Aa2	Stable	$1,749	0.9%	$2,109	$262	12.4%
22	Allstate Insurance Group	Aa2	Stable	$1,706	0.8%	$16,769	$256	1.5%
23	Progressive Casualty Group	Aa2	Stable	$1,634	0.8%	$4,671	$245	5.2%
24	Arch Capital Group	Not Rated		$1,585	0.8%	$479	$238	49.6%
25	Clarendon National Insurance Group	Not Rated		$1,467	0.7%	$565	$220	38.9%
	Est. Total Industry			$204,424	100.0%	$358,905	$30,664	8.5%
	Top 5 Companies			$71,168	34.8%	$51,588	$10,675	20.7%
	Top 10 Companies			$100,622	49.2%	$128,162	$15,093	11.8%
	Top 25 Companies			$133,973	65.5%	$229,438	$20,096	8.8%

Source: Company Reports, National Underwriter Insurance Data Services

[1] Assumes direct premiums written equals direct premiums earned for calculation of TRIA deductible
[2] 2003 Combined Statutory Surplus (2004 Data Not Available)
[3] Moody's Ratings as of June 3, 2005
Note: State Compensation Insurance Fund of CA had 2004 DPW of $8.15 billion, but was not included since it is a residual insurer

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