THE TERRORISM RISK INSURANCE ACT: SHOULD IT BE RENEWED?

A Report by the Consumer Federation of America

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BACKGROUND

In November of 2002, President Bush signed into law the Terrorism Risk Insurance Act of 2002. TRIA set up a program of federal reinsurance with no premium charged to the insurers. It mandated that the insurers write terrorism coverage, which would then be backed by the federal reinsurance program.

If and when a terrorism event occurs, the Secretary of the Treasury must certify that it qualifies as a reimbursable loss under TRIA, with at least $5 million in aggregate losses. Someone acting on behalf of a foreign interest must also commit the attack. If an incident meets these criteria taxpayers pay for insurance industry losses in accordance with a schedule that varies over time.

In 2003, insurers were responsible for losses below a deductible of 7 percent of insurers' direct earned premium (DEP) for eligible commercial lines in the 2002 calendar year. In 2004, 10 percent of the 2003 DEP is the deductible. In 2005, 15 percent of the 2004 DEP is the deductible[1].

Above the deductible amount, the federal "backstop" is 90 percent of a company's insured terrorism losses, capped at an overall industry level of $100 billion.

If an event triggers federal involvement, insurers will be required to pay back a very small layer of taxpayer assistance, which could be passed on to insurance consumers in the form of a surcharge, but it is not a significant amount in major terrorism events.[2]

This study assumes that TRIA will be extended through 2005. The question that will be considered is whether TRIA should be extended beyond 2005 and, if so, what should be the requirements of any extension.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

After evaluating the availability and pricing of terrorism insurance in the current market, it is clear that TRIA is no longer needed. Industry experts have concluded that most of the country has no significant terrorism risk under TRIA. The private sector will be covering the entire risk by 2005 in all but nine large cities. The only question is whether these nine cities, identified by industry experts as the most likely target areas of terrorists, need any taxpayer support beyond

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[1] If the program is extended to 2005 (a decision that the Secretary of the Treasury must make by September 2004 under the provisions of TRIA).

[2] TRIA does not require <u>any</u> payback if losses exceed $10 billion in the first year of the program, $12.5 billion in the second, and $15 billion in year three. Even when payback is required, it is miniscule: insurers would only pay back the <u>difference</u> between the total amount of retentions paid by individual insurers and the caps stated above.

2005. As a result, CFA believes that there is no need to extend TRIA when it expires at the end of 2005.

However, if Congress considers any such back up, it should:

- Target only the nine cities where the risk is high;
- Encourage private insurance mechanisms to quickly assume the risk;
- Only back up truly exceptional events, such as attacks with weapons of mass destruction (WMD); and
- Result in no cost to taxpayers, as the Treasury Department should require that actuarial rates, if not greater-than-actuarial-rates, be charged for such coverage.

THE KEY QUESTION FOR CONGRESS

The central focus of this study, and the primary question before Congress in considering any extension of TRIA beyond 2005, is what is the best estimate of the risk of terrorism available in the marketplace and can the private sector handle such risk absent taxpayer back-up.

The Treasury official charged with administering the TRIA program, Assistant Secretary Wayne Abernathy, has indicated that it is his initial assessment that the TRIA program should not be extended beyond 2005.

THE ISO MODEL

CFA has reviewed filings made with insurance departments establishing rates for terrorism coverage under TRIA. The most sophisticated analysis in these filings is that of the Insurance Services Office (ISO). Moreover, major segments of the insurance markets rely on the ISO approach to price the terrorism insurance they must offer under TRIA.

ISO is a ratemaking/ advisory organization licensed in almost all of the states. Many insurers follow ISO "loss cost" filings and adopt these filings, or major parts of these filings, for their own rating of risks. This is particularly true for terrorism insurance.

ISO has, for many years, operated on behalf of many companies that affiliate with it in a number of ways, from purchasing its services to membership in the ISO organization. ISO functions by developing what are known as "loss costs." Loss costs are that part of the rate that covers the expected claims and adjustment expenses, but not underwriting expenses and profit. For most lines of insurance, ISO files the loss costs with state insurance commissioners. These estimates are either formally approved or deemed allowable by the states without approval. TRIA overrode such state approval, but states can and have subsequently reviewed the rates, asked questions and, on occasion, have disapproved insurer filings. Once the loss costs are effective in a state, insurers add on their own expense and profit factors to the loss costs, or some derivative of them, as the basis for the rates they then charge to businesses.

ISO is known as a conservative rate-maker (i.e., pricing on the high side to protect all insurers who adopt its pricing recommendations.)

ISO owns a modeling company, AIR, which has developed models to price natural catastrophes such as hurricanes and earthquakes. AIR was tasked by ISO with developing a terrorism model to estimate terrorism insurance expected losses.

The AIR terrorism model estimates losses to property/casualty insurers from future terrorism attacks in America. It considers all sorts of terrorism: domestic and international, conventional and WMD. In estimating the loss costs for TRIA, AIR focused on the TRIA covered commercial lines of property/casualty insurance.

AIR modeled both the frequency and the severity of attack, employing the advice of terrorism experts[3] and utilizing the Delphi Method to combine the opinions of the experts with historical information. The Delphi Method was employed because historical data alone on terrorist activities was thought to be too sparse to be useful without additional analytic information. This situation is similar to the need that existed after Hurricane Andrew to come up with new methods for predicting hurricane risk. Up till then, the insurers thought they could base hurricane insurance rates solely on recent history. Andrew taught insurers that they needed to examine thousands of computer-generated years of experience beyond the historical data to obtain an accurate projection of future losses.

The AIR model developed information on over 300,000 targets (such as airports, churches, etc.). The experts estimated which targets were high-risk and which were not. They developed detailed information on each terrorist group, including their historic attack frequency and weapons used. Conventional weapons, plane crashes, bombs and WMD (chemical, biological, radiological and nuclear) were all considered in the severity calculations.

The models were applied to the structures (i.e., the actual insured buildings for the industry) in the database, estimating damage from each type of weapon to the exposed properties.

Based upon the model, ISO concluded that the risk of terrorism varied between geographical locations. They split the nation into three tiers:

<u>Tier 1 -- High Hazard</u>

New York City (all boroughs)
San Francisco County, CA
Washington, D.C.
Cook County IL (Chicago)

<u>Tier 2 – Moderate Hazard</u>

Suffolk County, MA (Boston)
King County, WA (Seattle)
Los Angeles County, CA

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[3] Counter-terrorism experts with experience at the top levels of government were employed, including those from CIA, FBI, DOD, DOE and other agencies.

Harris County, TX (Houston)
Philadelphia County, PA

Tier 3 – Low Hazard

Remainder of U.S.A.

AIR calculated loss costs based upon these tiers for most lines of insurance. In General Liability, the same loss cost was used across the nation; no tiers were employed.

ISO adjusted the AIR calculations for several actuarial considerations, including the TRIA backstop effect (lowering the loss costs when the Act has the taxpayer bearing the most risk and raising it when the taxpayer liability is lower.) In the final analytical run, AIR did not evaluate the WMD part of the loss cost projection, so ISO significantly increased the loss costs to reflect this risk as a separate step in the process. For instance, based upon the expert input, ISO doubled the loss costs from conventional weapons for property coverages.

ISO estimated the percentage of risk retained by insurance companies as part of this calculation. As the deductibles rise during the three years of the Act, the insurer retention also rises. ISO calculates the retention of insurers under TRIA to be:

Tier	TRIA Year 1	TRIA Year 2	TRIA Year 3
1	40%	55%	70%
2	75%	85%	95%
3	90%	95%	100%

This means that, by year 3, 2005, the private sector is fully covering the risk in all but the nine cities of Tiers 1 and 2.

The model and ISO adjustments projected terrorism insured losses annually to be $5.75 billion before tax considerations. To put this projection into perspective, the 9/11 loss was $40 billion before tax considerations. ISO thus projects a 9/11 level of loss every 6.96 years.

Over time, ISO anticipates that terrorism insured losses will be 50 percent in property losses, 10 percent in general liability losses and 40 percent in other losses (including workers' compensation, aviation, inland marine, etc.)

ISO RESULTS

Since half of the ISO projected losses are property insurance, our analysis closely examines that line of insurance.

The ISO loss costs per $100 of terrorism coverage purchased by a business for property insurance is as follows:

LOSS COSTS FOR TERRORISM UNDER TRIA
BUSINESS PROPERTY INSURANCE

	PROGRAM YEAR ONE		PROGRAM YEAR TWO		PROGRAM YEAR THREE	
TIER	BUILDING	CONTENTS	BUILDING	CONTENTS	BUILDING	CONTENTS
1	0.108	0.078	0.145	0.106	0.183	0.134
2	0.018	0.012	0.021	0.014	0.023	0.016
3	0.001	0.001	0.001	0.001	0.001	0.001

What does this loss cost table mean in terms of what an insured building's insurance premium might be in year three of the program?

The loss cost is the risk portion of the ultimate price a policyholder might pay. The insurance company would add two factors to account for: (1) the expenses of underwriting and (2) a profit allowance. This analysis estimates that 50 percent of the premium is being used for overhead expenses and profit and 50 percent to pay loss costs. [4] In other words, loss costs are doubled to estimate the total premium.

The estimate further assumes that the value of the structure being insured is $10 million and the contents in that building are worth $5 million.

In the third year of TRIA (2005), the rate for tier 1 would be 36.6¢ per $100 for the building[5]. Multiplying that by $10 million produces a premium for the building of $36,600. For contents, the rate would be 26.8¢ per $100[6]. The premium for $5 million in contents would be $13,400.00. The total premium for that property, including contents, would be $50,000.

If the TRIA backstop were removed, the $50,000 would rise to $71,428.57, an increase of $21,428.57. This is calculated by dividing the $50,000 by the insurance company retention for year 3 in tier 1 of 70%.

In the third year (2005), the rate for tier 2 would be 4.6¢ per $100 for the building[7]. Multiplying that by $10 million produces a premium for the building of $4,600. For contents, the rate would be 3.2¢ per $100[8]. The premium for $5 million in contents would be $1,600. The total premium for that property, including contents, would be $6,200.

If the TRIA backstop were removed, the $6,200 would rise to $6,526.32, an increase of $326.32. This is calculated by dividing the $6,200 by the insurance company retention for year 3 in tier 2 of 95%.

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[4] Based on the industry-wide average expense for 2002 for commercial property predominating insurers of 28 percent of premium, plus a very generous profit to premium ratio of 22 percent.
[5] 18.3¢ per $100 times 2.
[6] 13.4¢ per $100 times 2.
[7] 2.3¢ per $100 times 2.
[8] 1.6¢ per $100 times 2.

In the third year (2005), the rate for tier 3 would be 0.2¢ per $100 for building[9]. Multiplying that by $10 million produces a premium for the building of $200. For contents, the rate would be 0.2¢ per $100[10]. The premium for $5 million in contents would be $100. The total premium for that property, including contents, would be $300.

If the TRIA backstop were removed, the $300 would not rise since the insurer retention in year 3 for tier 3 is 100% of the risk.

Commercial property is half of the risk of terrorism, according to ISO's model. Other lines have even lower prices.

Commercial auto liability uses a loading of a percentage of premiums of 1/10th of one percent to calculate the terrorism premium and for physical damage the load is 8/10th of one percent.

Commercial general liability (premises operations and products) uses business type classes to rate the coverage. Above average classes for premises operations liability insurance include such businesses as oil refineries and dams. Airline and chemical manufacturers are examples of the higher risk businesses for products liability insurance, according to ISO. Third year premium factors for this line of terrorism insurance are as follows:

Tier	Above Average Classes	Below Average Classes
1	.198	.009
2	.083	.041
3	.017	.009

THE NCCI MODEL/NCCI RESULTS

NCCI is a ratemaking/ advisory organization licensed in almost all of the states. It focuses on workers' compensation insurance. Many insurers follow NCCI loss cost filings and adopt these filings, or major parts of these filings, for their own rating of risks.

NCCI has, for many years, operated on behalf of many companies that affiliate with it in many ways, from purchasing its services to becoming a member of the organization. Like ISO, NCCI functions by developing what are known as "loss costs."

NCCI is also known as a conservative rate-maker (i.e., pricing on the high side to protect all insurers who adopt its pricing recommendations.)

For terrorism insurance ratemaking, NCCI also used modeling. It selected the EQECAT firm for this purpose.

The NCCI has filed rates of 2¢ per $100 of payroll in most states. Higher rates were filed in some places, such as DC, where loss costs were filed at 7¢ per $100. According to NCCI, the

[9] 0.1¢ per $100 times 2.
[10] 0.1¢ per $100 times 2.

estimated premium impact from the TRIA risk nationally is 1.5%, varying by state. Some examples are DC at 12.5%, Virginia at 3.8%, Arizona at 2.0% and Louisiana at 0.8%.

DESPITE LOW RATES FOR MOST AREAS, THERE ARE FEW BUYERS OF TRIA BACKED TERROR COVERAGE

According to a survey by the Council of Insurance Agents and Brokers, (CIAB) "Half of the commercial brokers responding to the survey said fewer than 20 percent of their clients are actually buying the federally backed terrorism coverage. They attributed the low interest primarily to the high cost of coverage and to their clients' belief that they are not likely to be targets of terrorism."

Our analysis clearly reveals that costs are low in most of the country. Commercial insurance buyers in most of the nation are reluctant to buy TRIA backed coverage because of the perception that terrorism will not impact them and that, even at very affordable rates, the price is too high.

This finding of the CIAB survey supports our contention that ISO and NCCI price at the high end of the indications to make the rates attractive to even their most ineffective underwriting insurance affiliates. The risk is viewed as extremely remote in areas outside of the four target cities of ISO Tier 1 by both the experts that consulted with AIR/ISO and by the buyers of insurance.

CURRENT PROPERTY/CASUALTY INSURER PROFITABILITY AND FINANICAL SOUNDNESS

The profits of the insurers selling TRIA-backed terror coverage are excellent now, and are expected to remain good for some years to come, as the industry ends its hard market phase.

Overall, the property/casualty insurance industry added 22 percent to policyholder surplus in 2003 (a whopping $65 billion!) according to A.M. Best and Co.[11]

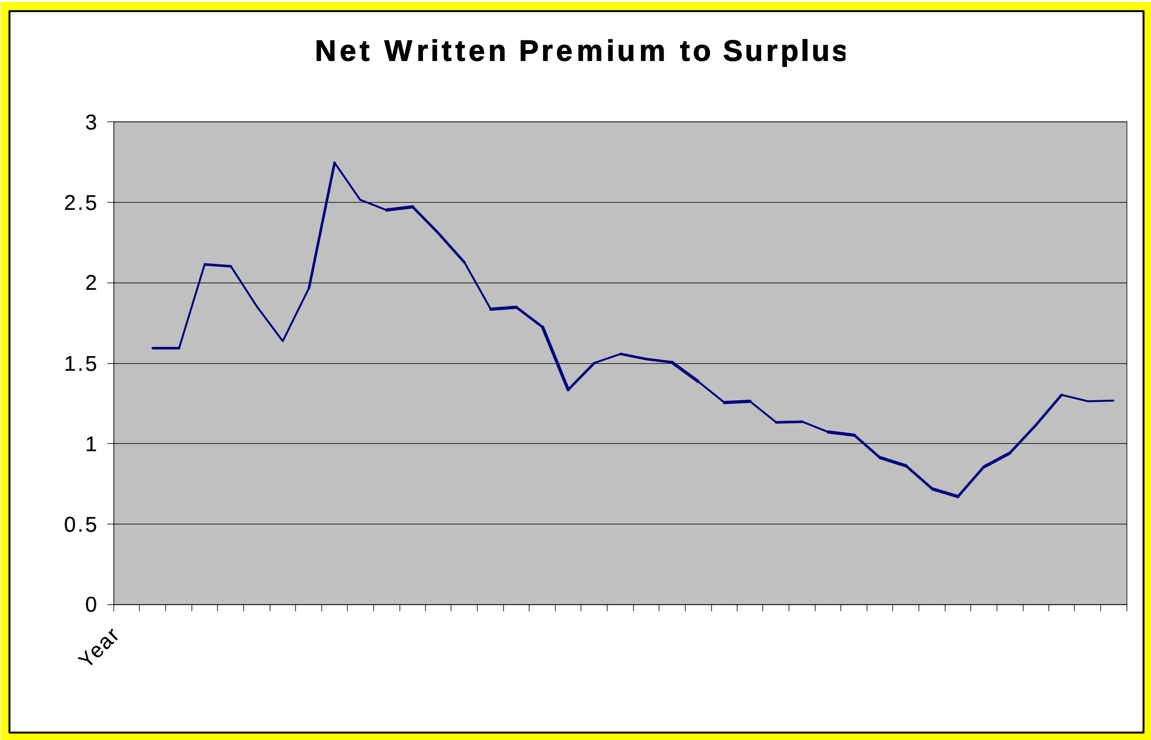
The top five stock insurance groups in the nation are Allstate, AIG, Zurich, Berkshire Hathaway and Travelers, with written premiums of $23.3 billion, $21.0 billion, $17.4 billion, $15.2 billion and $11.9 billion respectively. (State Farm, the nation's largest insurer at $42.7 billion, is a mutual insurer specializing in personal lines coverage.)

Consider the outstanding profits of these insurers in 2003:

Allstate	$2.3 billion (16.5% ROE)
AIG	$9.3 billion (17.2% ROE)
Zurich	$2.1 billion (12.5% ROE)
Berkshire Hathaway	$8.2 billion (16.2% ROE)
Travelers	$1.7 billion (17.4% ROE)

[11] Special Report of April 12, 2004, "Industry Reports Dramatically Improved 2003 Operating Results," A.M. Best & Co.

The most common test of the financial solidity of the property-casualty insurance industry is the ratio of net premiums written to surplus (retained earnings). Here is how that key ratio has performed over time:



As the chart reveals, the ratio has declined, generally, over time. During the recent soft market it rose from under 1 to 1 to about 1.3 to 1, still very safe by historical ratio standards. The recent increase in the ratio has now stabilized and, if past history of the years following a hard market is a guide, will start dropping again shortly. The historic safe level, known as the "Kenney Rule" for the financial writer Roger Kenney, is 2 to 1. Commissioners get particularly concerned if the ratio approaches 3 to 1.

The industry is doing very well and is fundamentally very sound. It can afford this terrorism risk.

The ISO estimates the industry-wide expected losses from terrorism are $5.75 billion per year. In 2002, AM Best reported premiums written for commercial lines of $184 billion and incurred losses of $127 billion. Surplus, calculated at the current 1.3 to 1 ratio of premiums to surplus, is about $142 billion. Related to premiums, the terrorism risk per year is about 3 percent. Related to losses, the terrorism expected losses are about 4.5 percent. Related to surplus, expected annual terrorism losses are about 4 percent.

These are manageable costs when the average terrorism loss projected by ISO is incurred. However, there is substantial variation around the average loss, since most years have no terrorist attacks but some years see significant damage from terrorist attacks. Some of the variation (particularly variations by carrier) can be controlled if the insurers set up voluntary pooling arrangements. To the extent that there are major losses in excess of, say, $50 billion after taxes,[12] federal taxpayer involvement might be helpful.

ANALYSIS

The best analysis of the terrorism risk CFA has seen is the ISO model. The results of the model show that the risk is relatively manageable for insurance companies, especially now that insurers are extremely profitable and their retained earnings/surpluses are high. For most areas of the country, terrorism risk premiums are very low, indicating a low assessment of risk by insurers. However, even at very affordable rates, business consumers are not buying the coverage because they view the risk as minimal to non-existent. According to the ISO model, the costs of terrorism events in Tier 3 areas of the nation (all areas excerpt for the nine large cities of Tiers 1 and 2) will be fully covered by the private market as of year three (i.e., 100 percent industry retained, zero percent taxpayer retained in 2005).

The only risks requiring consideration of taxpayer back up are in the nine cities of ISO Tiers 1 and 2 and particularly in the four Tier 1 cities.

Insurers might argue that without taxpayer support, they will not be able to offer affordable prices and will either not write the coverage or price it at much higher levels. Insurers also claimed that this would happen in early 2002, when the Senate did not pass the backstop legislation. But the threatened collapse of the market did not happen. Indeed, CFA studies of that period, when private reinsurance expired, showed that the insurance market was responding to all risks, even skyscrapers in New York City.[13]

Even without federal back up, terrorism insurance would be surprisingly affordable. As the above analysis shows, there should be no increase in pricing in most of the nation – except for nine cities – even if the backstop were eliminated. In Tier 2 areas, an owner of a $10 million building with $5 million in contents would see only a $326 increase.

In the four highest risk cities, an owner of a building valued at $10 million, with $5 million in contents, would see an increase of $21,429. These cost increases are very manageable unless a truly monumental terrorist attack occurs, perhaps using WMD. It is not the average expected costs that present a problem; it is the possibility, however remote, of a huge loss far exceeding the 9/11 level of loss.

There is, therefore, no justification for renewing TRIA in its current configuration. The private sector can and will respond to the withdrawal of TRIA with innovations (such as pooling, reinsurance, and securitization) to keep the market functioning well with no federal back up.

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[12] The insurance industry handled 9-11 losses with little difficulty. They were $40 billion before tax consideration and $24 billion after.

[13] See, e.g., "How the Lack of Federal Back-Up for Terrorism Insurance Has Affected Insurers and Consumers: An Update," CFA, 1/23/02; "Testimony of J. Robert Hunter Before the Oversight and Investigations Subcommittee of the House Financial Services Committee on the Terrorism Insurance Market since September 11th," February 27, 2002.

IF A SUCCESSOR TO TRIA IS NEEDED, WHAT SHOULD IT LOOK LIKE?

If Congress feels that it needs to leave in place a terrorism insurance backstop, CFA offers these principles for adoption of any new program:

- It should minimize interference with the development of private insurance and reinsurance markets;

- It should limit taxpayer support to truly large events from the terrorist use of WMD, such as chemical, biological and nuclear weapons; and

- It should come at no overall cost to the taxpayer.

If Congress considers it necessary to adopt a plan, it should be structured in the following way:

First, there is certainly no need for a plan in Tier 3, that part of the nation outside of New York, DC, San Francisco, Chicago, Boston, Seattle, LA, Houston and Philadelphia.

Second, it is highly doubtful that any plan is needed in Tier 2 (Boston, LA, Seattle, Houston and Philadelphia), since 95 percent of the risk for these will be covered privately by the end of 2005 according to ISO, leaving only 5 percent to be paid for by taxpayers.

Third, the plan for the few remaining cities that might require back-up should order industry-wide deductibles of more than the 15 percent that is mandated in year 3 of the current program. We suggest an industry-wide deductible of $50 billion, after tax considerations (i.e., a pre-tax deductible of $76.9 billion[14]) for the first year of the renewed TRIA, increasing by $10 billion a year after that.

Fourth, the share of losses that insurers are required to pay above the deductible amount must be increased. TRIA currently requires insurers to pay for 10 percent of losses above the deductible amount the insurer retains. That is, if an insurer had a deductible of one million dollars and suffered a TRIA eligible loss of two million, TRIA would pay $900 thousand and the insurer would pay $100 thousand. If a new TRIA is put in place after 2005, this co-pay should be made higher for the industry, perhaps starting at 15% and increasing by 5% a year thereafter. The fact that insurer capacity to provide terrorism coverage has grown since 9-11 should be reflected in any new backstop that is put on the books.

Fifth, insurers should be charged a premium for the reinsurance provided by the government, in order to pay for the taxpayer exposure required under any extension of the Act. In our view, these charges should exceed the actuarial indications in order to allow private reinsurers to take steps to compete with the government program. CFA suggests charging insurers a terrorism premium of 125 percent of what is actuarially necessary in the first year, increasing by 25 percent each year thereafter (e.g., 150 percent in the second year of any extension to TRIA). The

[14] $50 billion adjusted by the corporate tax rate of 35 percent [$50 billion/(1 – 0.35)].

Federal Riot Reinsurance Program (under the Urban Property Protection Act of 1968) should be used as model in pricing terrorism coverage. This plan charged actuarial rates to back up the insurance industry in keeping riot coverage in place in the nation's inner cities following the riots of the late-1960s. Taxpayers made money on sales of riot reinsurance, while maintaining property insurance availability and affordability throughout the country. There is no reason why taxpayers should subsidize the wealthy property/casualty insurance industry in the provision of terrorism insurance.

In order for insurers to have time to develop voluntary pooling arrangements, for the reinsurance market to have time to develop pricing for the private backstop, and for states to consider necessary actions, CFA calls on the Treasury Department to make its proposals for the post-2005 period known quickly.

NECESSARY STATE ACTIONS

States should also be active in the period before TRIA expires on December 31, 2005. They should be prepared to allow reasonable rate increases to reflect the withdrawal of the taxpayer-provided free reinsurance under TRIA. They should take firm action to assure that rates do not go up more than necessary. It is clear that minimal increases are sufficient, as indicated in the analysis above.

States should also act to allow the necessary pooling arrangements to ensure the costs of terrorism incidents are spread widely. States should consider creation of reinsurance facilities for this purpose.

To the extent that some insurers stop offering terrorism coverage, which is doubtful given the history of the terrorism insurance market in 2002 prior to the enactment of TRIA, assistance for businesses seeking coverage should be provided. Market Assistance Plans (MAPs) have served this function well in previous market dislocations. A MAP is a state government sponsored facility where businesses seeking insurance but having difficulty finding an insurer to write the risk be put in touch with private insurance entities that specialize in the insurance product being sought. MAPS have worked to put willing buyers and willing sellers together when markets have been tight.

CONCLUSION

TRIA is no longer needed.

Most of the country has no significant terrorism risk. The private sector will be covering the entire risk by 2005 in most of the nation (that part in Tier 3 of ISO's model). The only question is whether nine cities, identified by ISO experts as the most likely target areas for terrorist attacks, need any taxpayer support beyond 2005.

CFA believes that there is no need for taxpayer back up after 2005.

However, if any back-up beyond 2005 is considered by Congress, it should be targeted at the cities where the risk is high, encourage private insurance mechanisms to quickly take over the risk, only back up truly large terrorism events such as WMD attacks, and result in no overall cost to the taxpayer.