Report of the
President’s Working Group On Financial Markets

The Long-Term Availability and Affordability of Insurance for Terrorism Risk

Completed pursuant to 15 U.S.C. 6701 note § 108(e)

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Calendar year, as defined by TRIA § 102(11).................................Program Year
Cap on annual liability, as provided by TRIA § 103(e)(2)..............................Program Cap
Credit rating agencies.................................................................CRAs
Department of the Treasury............................................................Treasury
Direct earned premium.................................................................DEP
Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ..........Dodd-Frank Act
Federal Insurance Office.................................................................FIO
Government Accountability Office....................................................GAO
Insurance Linked Security..............................................................ILS
Insurance Services Office..............................................................ISO
Lines of insurance for which federal payments may be made under TRIA ......TRIP-eligible lines
National Association of Insurance Commissioners....................................NAIC
Nuclear, biological, chemical, or radiological..........................................NBCR
President’s Working Group on Financial Markets.....................................PWG
Probable Maximum Loss..................................................................PML
Property and casualty.....................................................................P/C
Secretary of the Treasury.................................................................Secretary
Terrorism Risk Insurance Act of 2002, as amended.................................TRIA
Terrorism Risk Insurance Extension Act of 2005 .....................................TRIEA
Terrorism Risk Insurance Program......................................................TRIP
Terrorism Risk Insurance Program Reauthorization Act of 2007...............TRIPRA
The terrorist attacks of September 11, 2001........................................9/11
Threshold for federal payments, as provided by TRIA § 103(e)(1)(B) .........Program Trigger
Total Insured Value........................................................................TIV
I. EXECUTIVE SUMMARY

The Terrorism Risk Insurance Act of 2002, as amended (TRIA), requires U.S. insurers to make insurance available for losses resulting from acts of terrorism, and provides a federal government backstop for the insurers’ resulting financial exposures. TRIA established in the U.S. Department of the Treasury (Treasury) the Terrorism Risk Insurance Program (TRIP), which is responsible for administering the essential components of TRIA. Section 108(e) of TRIA requires the President’s Working Group on Financial Markets (PWG) to conduct, on an ongoing basis, an analysis of the long-term availability and affordability of insurance for terrorism risk, and to report to Congress regarding the PWG’s findings. The PWG previously reported to Congress in 2006 and again in 2010 (the 2006 PWG Report and 2010 PWG Report, respectively). The analysis and conclusions in the 2006 PWG Report and the 2010 PWG Report were based on consultations with industry participants and comments responding to Federal Register notices. In addition, Treasury provided an assessment of TRIA to Congress on June 30, 2005. The 2005 Treasury report relied in part on surveys of various stakeholders conducted by an independent research firm under Treasury auspices.

To assist the PWG’s analysis in connection with this report (this Report), on July 16, 2013, Treasury published a notice and request for comment (the PWG Notice), in reply to which 29 written comments were submitted. Submissions in reply to the PWG Notice are available at treasury.gov/initiatives/fio.

This Report draws upon the comments received in response to the PWG Notice, as well as from direct engagement by PWG member staff with a range of stakeholders, including consumer advocates, insurers, reinsurers, industry services firms, state insurance regulators, commercial insurance policyholders, the National Association of Insurance Commissioners (NAIC), and industry trade associations. Most comments submitted to the PWG addressed whether and to what extent uncertainty concerning TRIA’s scheduled expiration at the end of 2014 affects the affordability and availability of terrorism risk insurance, which is referenced in this Report.

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1 15 U.S.C. § 6701 note. Citations herein to TRIA, as amended, refer to the relevant section(s) of the statute.
2 For purposes of this report, TRIA refers to the statute, as amended, and TRIP refers to the program, as it is administered.
3 The PWG is composed of the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, the Chair of the Securities and Exchange Commission, and the Chairman of the Commodity Futures Trading Commission (or their respective designees). The Secretary of the Treasury, or his designee, is the Chairman of the PWG. Exec. Order No. 12,631; 53 Fed. Reg. 9,421 (Mar. 18, 1988).
4 The PWG must submit the reports to the Committee on Banking, Housing, & Urban Affairs of the Senate and the Committee on Financial Services of the House of Representatives. TRIA § 108(e).
Consistent with the 2006 and 2010 PWG reports, this Report draws its data and conclusions from comments submitted in response to the PWG Notice, particularly data provided by two global insurance brokers, as well as from consultations with various stakeholders.

The findings of the PWG in this Report include:

- Insurance for terrorism risk currently is available and affordable. The availability and affordability of insurance for terrorism risk has not changed appreciably since 2010.
- Prices for terrorism risk insurance vary considerably depending upon the policyholder’s industry and the location of the risk exposures.
- Such prices have declined since TRIA was enacted and, in the aggregate, currently approximate 3 to 5 percent of commercial property insurance premiums.
- Take-up rates—i.e., the percentage of policyholders that purchase coverage for terrorism risk—have improved since the adoption of TRIA and are roughly stable at 60 percent in the aggregate (as compared to 27 percent in 2003, the first full year TRIA was in effect).
- Information provided to the PWG in response to the PWG Notice indicates that the market currently is tightening in light of uncertainty as to whether TRIA will be renewed.
- The private market does not have the capacity to provide reinsurance for terrorism risk to the extent currently provided by TRIA.
- In the absence of TRIA, terrorism risk insurance likely would be less available. Coverage that would be available likely would be more costly and/or limited in scope.

Overview of the Terrorism Risk Insurance Act

After the September 11th attacks (9/11), insurers and reinsurers largely withdrew from the terrorism risk insurance market. This and other factors contributed to a severe market shortage for terrorism risk insurance, which Congress sought to address through the enactment of TRIA.

In general, TRIA requires each commercial property and casualty (P/C) insurer to participate in TRIP and to make coverage available for losses resulting from certified acts of terrorism. Further, TRIA authorizes the Secretary of the Treasury (the Secretary) to make federal payments to an insurer for a portion of insured losses resulting from a certified act of terrorism that exceed the insurer’s deductible. Insurers also co-participate with federal funding with respect to payments for losses above the deductible, and may be required to surcharge policyholders in order to fund recoupment payments made to Treasury. Treasury has never made a payment to any insurer under TRIP.

As enacted, TRIA was originally scheduled to expire on December 31, 2005, but was reauthorized in 2005 and again in 2007. With both reauthorizations, Congress modified elements of TRIP, in part to reduce federal taxpayer exposure under TRIA to insured losses from acts of terrorism. The 2007 reauthorization of TRIA is scheduled to expire on December 31, 2014. House and Senate Committee hearings regarding the question

Availability and Affordability of Terrorism Risk Insurance

The per-risk capacity – a metric used to measure the amount of available coverage – of the market for terrorism risk insurance increased only modestly since 2010. The aggregate policyholder take-up rate appears to have stabilized at 60 percent. In certain industries, take-up rates may be substantially higher (e.g., 81 percent for the media industry) or lower (e.g., 42 percent for the chemicals industry). Similarly, costs vary broadly, and may be much higher for high risk properties and in certain urban areas, such as Chicago, New York City, San Francisco, and Washington, D.C. Overall, premium rates for terrorism risk coverage have declined by about half since the post-9/11 peak, have been relatively stable over the last several years, and currently represent a small percentage of overall commercial property insurance premiums.

Several factors may affect, and in some instances challenge, the availability and affordability of insurance for terrorism risk, including: (1) the ability of insurers to estimate the frequency and severity of losses resulting from terrorism; (2) the potential for catastrophic losses resulting from terrorism; (3) insurer policyholder surplus levels; (4) insurer credit rating agency considerations; (5) private reinsurance capacity; and (6) uncertainty relating to the reauthorization of TRIP.

After 9/11 and prior to the enactment of TRIA, property owners and developers reported the inability to procure adequate insurance coverage for terrorism risk, or the inability to find coverage at reasonable prices. In 2005 and again in 2007, in each case as then-scheduled expirations of TRIA approached, prices for terrorism risk insurance increased. Similarly, industry sources report concerns that the long-term availability and affordability of insurance for terrorism risk will be adversely affected if TRIA is not renewed before it expires at the end of 2014, and that the market is already tightening in anticipation of the termination of the federal government backstop.

15 See section III.C.1.
17 Id. at 9.
18 Id. at 10.
19 Id. at 11-14; Comment to the PWG Notice from Aon plc, 6-7 (September 2013).
21 See Comment to the PWG Notice from Aon plc, 6 (September 2013) (showing median terrorism risk insurance premiums as a percentage of median property insurance premiums from 2002 through 2013).
22 See, e.g, Marsh 2013 Report at 19-21; Comment to the PWG Notice from Aon plc, 12, 18-21 (September 2013).
As TRIP has evolved through amendments to TRIA, the U.S. insurance industry has adapted to the resulting increases in net terrorism exposure under commercial policies. However, the U.S. insurance industry remains unprepared to retain the entire exposure to terrorism risk. In fact, 28 of the 29 commenters to the PWG Notice assert, to varying degrees, that pricing for terrorism risk insurance will be adversely affected, and its availability substantially curtailed, should TRIA expire at the end of 2014.\textsuperscript{23} In its response to the PWG Notice, Aon plc (Aon), a global insurance and reinsurance broker, concluded from a survey of over 1,200 of its clients that: “If TRIA were to expire in 2014, the vast majority of the existing insurance market for terrorism will disappear.”\textsuperscript{24} Marsh & McLennan Companies (Marsh), another global industry services provider, made a similar observation, noting that some insurers it surveyed “have indicated to us that they could be forced to withdraw from geographical areas that have the greatest need for terrorism coverage or they may even exit certain lines of business, such as workers’ compensation or commercial property in high profile jurisdictions.”\textsuperscript{25} Some commenters disagreed with this conclusion. For example, one commenter suggested that the market is sufficiently robust and mature to operate without the government backstop, albeit at higher prices.\textsuperscript{26}

**Comments to the PWG Notice Regarding Potential Modifications to the Terrorism Risk Insurance Program**

In light of the pending expiration and potential reauthorization of TRIA, commenters to the PWG Notice and other interested parties have suggested various modifications to TRIA intended to bring greater certainty to the marketplace, improve the availability and affordability of insurance for terrorism risk, and/or decrease federal taxpayer exposure to insured losses resulting from acts of terrorism. Although an analysis of potential modifications to TRIA is outside the scope of PWG’s mandate to report on the long-term availability and affordability of insurance for terrorism risk,\textsuperscript{27} such comments are summarized in this Report.

\textsuperscript{23} One commenter, the Cato Institute, expressed a contrary view. Specifically, the Cato Institute argued that the private market is capable of insuring terrorism risk and that TRIA should be allowed to expire at the end of 2014. Comment to the PWG Notice from the Cato Institute, 1 (September 2013).

\textsuperscript{24} Comment to the PWG Notice from Aon plc, 3 (September 2013). Aon reported to the PWG that the clients included in its survey resemble businesses of the size and complexity similar to those in the Fortune 2000. Data from the Aon survey reflect the twelve-month period ending June 30, 2013.

\textsuperscript{25} See Marsh \textit{2013 Report} at 1-2.

\textsuperscript{26} Comment to the PWG Notice from the Cato Institute, 16 (September 2013).

\textsuperscript{27} See TRIA § 108(e).
II. OVERVIEW OF THE TERRORISM RISK INSURANCE ACT

This section of the Report provides a brief background regarding the commercial property and casualty insurance sector in general, and then describes the Terrorism Risk Insurance Program, including how it has evolved since TRIA’s enactment in 2002.

A. Commercial Property and Casualty Insurance

Commercial lines insurance policies allow businesses to transfer risk exposure to insurers in exchange for premium payments. Just as with personal lines of insurance for homeowners or private passenger auto, commercial lines policies stipulate the causes of loss (i.e., perils) covered, as well as other terms and conditions for the insurance policy to remain in effect. In 2012, commercial P/C insurance policies (including workers’ compensation) accounted for $247 billion – or 47 percent – of the approximately $524 billion of premiums written by the U.S. P/C insurance sector (commercial and personal lines).

With the exception of workers’ compensation insurance, commercial P/C policies are generally either “all-peril” or “named peril” policies. All-peril policies cover losses arising from perils that are not expressly excluded and typically cover losses arising from fire, smoke, windstorm, hail, civil disobedience, and vandalism, but exclude losses caused by acts of war. Prior to 9/11, losses from acts of terrorism typically were not excluded from all-peril policies. A named peril policy covers only losses arising from perils specified in the policy. Under state laws, workers’ compensation insurance must provide compensation for injuries or illnesses to covered individuals that occur in the course of employment, regardless of the peril.

The business of commercial P/C insurance is primarily regulated by state law. Most state insurance regulators are authorized to review and approve policy forms and rates, though the form and rate filing process and the applicable consumer protection standards vary by state. State law may prohibit certain exclusions in commercial P/C policies. For example, twenty-nine states, including New York, Illinois, and California, require an insurer to cover losses from fire following a broad range of events. Of those states, fifteen permit exclusions of fire losses following acts of terrorism, and fourteen states prohibit such exclusions.

Prior to 9/11, commercial all-peril P/C insurance policies generally did not exclude losses arising from acts of terrorism. Following the events of 9/11, which resulted in $32.5 billion of insured losses, insurers and reinsurers moved to reduce the potential for catastrophic insured losses resulting from acts of terrorism. Reinsurance renewals excluded terrorism risk. Due to limited availability of reinsurance coverage for terrorism risk, insurers sought to avoid exposure to catastrophic terrorism losses by excluding coverage of terrorism risk in commercial P/C insurance policies.

By early 2002, insurers were submitting terrorism exclusions for review by state insurance regulators in order to exclude coverage of losses arising from acts of terrorism. Where coverage of losses arising from acts of terrorism could not be excluded, such as for workers’ compensation insurance, some insurers declined to renew insurance policies altogether.

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29 All-peril policies may also be referred to as special peril policies.
30 With the exception of Texas, states require employers to provide workers’ compensation benefits to employees.
31 See Marsh 2013 Report at 19.
32 In 2001 dollars.
34 See, e.g., Comment to the PWG Notice from the National Council on Compensation Insurance, 6-7 (September 2013).
The relative unaffordability or outright unavailability of insurance for terrorism risk had far-reaching and adverse effects on the national economy, including the cancellation or delay of construction projects and commercial real estate transactions.35

B. Terrorism Risk Insurance Program

TRIA was enacted on November 26, 2002, in recognition that the widespread unavailability of insurance for terrorism risk “could seriously hamper ongoing and planned construction, property acquisition, and other business projects, generate a dramatic increase in rents, and otherwise suppress economic activity.”36 The stated purpose of TRIA is to establish a temporary federal program of shared public and private compensation for insured losses resulting from acts of terrorism, in order to:

- Protect consumers by addressing market disruptions and ensure the continued widespread availability and affordability of property and casualty insurance for terrorism risk; and
- Allow for a transitional period for the private markets to stabilize, resume pricing of such insurance, and build capacity to absorb any future losses, while preserving state insurance regulation and consumer protections.37

TRIA established TRIP within Treasury.38 TRIA authorizes the Secretary to administer TRIP and to pay a federal share of compensation to insurers for insured losses from a certified act of terrorism.39 TRIA requires insurers of certain commercial lines to participate in TRIP and to make coverage available for losses resulting from certified acts of terrorism.40 TRIA also defines a process for repayment by the insurance sector of some or all of any federal compensation paid under TRIP.41

Subtitle A of Title V of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act)42 established the Federal Insurance Office (FIO) in Treasury. The statute provides FIO with the authority to assist the Secretary in administering TRIP.

36 TRIA § 101(a)(5).
37 TRIA § 101(b).
38 TRIA § 103(a)(1).
39 TRIA § 103(a)(2).
40 TRIA §§ 103(a)(3), (c).
41 TRIA § 103(c)(7).
1. Mandating the Availability of Insurance for Terrorism Risk

TRIA requires insurers offering certain lines of commercial P/C insurance, commonly known as “TRIP-eligible lines,” to participate in TRIP. Specifically, TRIA requires each entity that meets the definition of an insurer\(^{43}\) to make available coverage for insured losses resulting from certified acts of terrorism “that does not differ materially from the terms, amounts, and other coverage limitations applicable to losses arising from events other than acts of terrorism” (the “make available” provision).\(^{44}\)

Subject to exclusions specified in TRIA,\(^{45}\) TRIP-eligible lines of insurance consist of certain commercial lines of P/C insurance.\(^{46}\) Under the implementing regulation, such commercial lines of insurance include excess insurance, workers’ compensation insurance, directors and officers liability insurance, and commercial insurance within the following lines:\(^{47}\)

- Fire and allied lines;
- Commercial multiple peril (liability and non-liability portions);
- Ocean marine;
- Inland marine;
- Workers’ compensation;
- Other liability;
- Products liability;
- Aircraft (all perils); and
- Boiler and machinery.

The regulation lists the following lines of business as not falling within the scope of TRIP-eligible lines:\(^{48}\)

- Federal crop insurance issued or reinsured under the Federal Crop Insurance Act (7 U.S.C. § 1501 et seq.), or any other type of crop or livestock insurance that is privately issued or reinsured;
- Private mortgage insurance (as defined in section 2 of the Homeowners Protection Act of 1988) (12 U.S.C. § 4901) or title insurance;
- Financial guaranty insurance issued by monoline financial guaranty insurance corporations;
- Insurance for medical malpractice;
- Health or life insurance, including group life insurance;
- Flood insurance provided under the National Flood Insurance Act of 1968 (42 U.S.C. § 4001 et seq.) or earthquake insurance;
- Reinsurance or retrocessional reinsurance;
- Commercial automobile insurance;

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\(^{43}\) An insurer is any entity, including any affiliate thereof, which receives direct earned premiums for TRIP-eligible lines of insurance and is: licensed or admitted to engage in the business of insurance in any state; an eligible surplus lines carrier; a federally-approved maritime, energy, or aviation insurer; a state residual market or workers’ compensation fund; or, to the extent provided in rules issued by the Secretary, a captive insurer or a self-insurance arrangement.

TRIA § 102(6).

\(^{44}\) TRIA § 103(c).

\(^{45}\) TRIA § 102(12)(B).

\(^{46}\) TRIA § 102(12)(A).

\(^{47}\) 31 C.F.R. § 50.5(u)(1).

\(^{48}\) Id.
The Long-Term Availability and Affordability of Insurance for Terrorism Risk

- Burglary and theft insurance;
- Surety insurance;
- Professional liability insurance;\(^{49}\) and
- Farmowners multiple peril insurance.

TRIA voided by operation of law any exclusion for acts of terrorism that existed in contracts for TRIP-eligible lines of insurance in force as of November 26, 2002.\(^{50}\) Additionally, TRIA voided any state approvals of terrorism exclusions for TRIP-eligible lines of insurance that were in force as of that date. An insurer may only exclude coverage for an act of terrorism if the policyholder authorizes the exclusion in writing, or fails to pay the increase in premium attributable to the terrorism risk coverage within 30 days of notification of the premium amount and the policyholder’s rights with respect to such coverage.\(^{51}\)

While TRIA requires insurers to make available insurance for terrorism risk on the same terms as other insurance, the law does not mandate any particular price for such coverage. Premiums charged by insurers remain subject to state regulatory authority, which varies by state in terms of the nature and extent of the regulatory review of rates charged by insurers. TRIA does not require a policyholder to purchase insurance for terrorism risk. If a policyholder declines coverage, an insurer may, but is not required to, “negotiate with the policyholder an option for partial coverage” if permitted by state law.\(^{52}\)

TRIA requires an insurer to make additional disclosures to policyholders as a condition for federal payment eligibility under TRIP. At the time of offer, purchase, and renewal of a policy, an insurer must provide clear and conspicuous disclosure to the policyholder of the premium charged for the coverage of losses from certified acts of terrorism, and of the federal share of compensation for such losses.\(^{53}\) In addition, an insurer also must provide to the policyholder a clear and conspicuous notice of the $100 billion Program Cap (described below).\(^{54}\)

### 2. Certifying an Act of Terrorism

Only losses from certified acts of terrorism are eligible for federal payments to insurers under TRIP. A certified “act of terrorism” is an act certified by the Secretary, in concurrence with the Secretary of State and the Attorney General:

- to be an act of terrorism;
- to be a violent act or an act that is dangerous to human life, property, or infrastructure;
- to have resulted in damage within the United States; and
- to have been committed by an individual or individuals, as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the U.S. government by coercion.\(^{55}\)

\(^{49}\) TRIA added “directors and officers liability insurance” to the scope of TRIP-eligible insurance. TRIA § 3(b)(2), 119 Stat. 2661.

\(^{50}\) TRIA § 105(a).

\(^{51}\) TRIA § 105(c).

\(^{52}\) 31 C.F.R. § 50.21(d). “Partial coverage” means “coverage that is on different terms, amounts, or coverage limitations, as long as such an offer does not violate any applicable State law requirements.” 31 C.F.R. § 50.24(a).

\(^{53}\) TRIA § 103(b)(2); 31 C.F.R. § 50.10.

\(^{54}\) TRIA § 103(b)(3); 31 C.F.R. § 50.15.

\(^{55}\) TRIA § 102(1). TRIA also provides that an act may occur outside the United States in the case of certain air carriers or vessels, or the premises of an U.S. mission. TRIA § 102(1)(A)iii(I),II).
TRIA prohibits the Secretary from certifying an act that was either committed as part of the course of a war declared by Congress, or that does not result in aggregate industry insured losses subject to TRIP exceeding $5 million. TRIA neither prescribes how insured losses should be measured nor what source(s) of insured loss data should be relied upon by the Secretary.

The Terrorism Risk Insurance Program Reauthorization Act of 2007 (TRIPRA) expanded the scope of acts to which TRIA may apply. Prior to TRIPRA, only an act of terrorism committed by individuals “acting on behalf of any foreign person or foreign interest” could have been certified. TRIPRA removed this condition, so that an act committed by any person may be certified.

As of this Report, no event has been certified by the Secretary, in concurrence with the Secretary of State and the Attorney General, as an act of terrorism.

3. Providing a Federal Share of Compensation for Insured Losses

Determination of whether and in what amounts insurers are eligible for payments under TRIP and whether and in what amount some or all of such payments may be subject to recoupment involves the interplay of multiple factors, including the $5 million certification requirement, the Program Trigger, individual insurer deductibles, federal and private co-participation percentages, an industry aggregate retention, and the Program Cap. These factors are described below.

a. Federal Payments to Insurers under TRIP

As originally established, the federal share of compensation to an insurer under TRIP for losses from a certified act of terrorism was equal to 90 percent (i.e., the federal share) of the portion of insured losses exceeding that insurer’s deductible during a Program Year (i.e., a given calendar year). Individual “insurer deductibles” are determined as a percentage of the insurer’s direct earned premium (DEP) for TRIP-eligible lines of insurance during the preceding calendar year. As enacted, TRIA established the insurer deductible at 1 percent of DEP for the period beginning on November 26, 2002, and ending on December 31, 2002, but increased it to 7 percent of DEP for the 2003 Program Year, 10 percent for 2004, and 15 percent for 2005. The Terrorism Risk Insurance Extension Act of 2005 (TRIEA) decreased the federal share from 90 percent to 85 percent of the portion of insured losses that exceeds an insurer’s deductible during a Program Year, beginning with 2007. Put another way, insurers with eligible losses were each subject to a 15 percent co-participation. Separately, TRIEA increased the insurer deductible from 15 percent of DEP to 17.5 percent in

56 This limiting clause does not apply with respect to coverage for workers’ compensation insurance. TRIA § 102(1)(B)(i).
57 TRIA § 102(1)(B)(ii).
58 For example, paid losses measure losses already paid to claimants, but may develop slowly and therefore underrepresent actual losses that will develop in the months following an insured event. Incurred losses may develop more quickly, but typically include estimates of unpaid losses, which will vary based on an insurer’s reserving practices and view of loss development.
59 See, e.g., Comment to the PWG Notice from the Property Casualty Insurers Association of America, 8 (September 2013).
60 TRIA § 102(1)(A)(iv).
61 TRIPRA § 3(a).
62 TRIA § 103(e)(1)(A).
63 Direct earned premium represents the amount of premium exposed to loss during a given period. Earned premium for a calendar year is equal to written premium plus the unearned premium reserve at the start of the year less the unearned premium reserve at the end of the year.
64 TRIA § 102(7).
2006 and to 20 percent in 2007 (in each instance DEP is based on the preceding calendar year). The deductible remains at 20 percent through 2014.65

Federal payments to insurers under TRIP for losses from a certified act of terrorism are not permitted unless the act of terrorism results in losses exceeding a “Program Trigger.”66 As originally enacted, TRIA included the $5 million certification requirement, but not a separate Program Trigger. TRIEA established a Program Trigger of $50 million for 2006, and increased that threshold to $100 million for 2007 and future years.67

The effect of these modifications to the federal share and to the insurer deductible, and the introduction and expansion of the Program Trigger, has been to steadily decrease the amount of federal payments potentially available to a given insurer under TRIP for losses from a certified act of terrorism. To illustrate, if in 2004 an insurer with $1 billion of DEP (as of 2003) incurred $400 million of losses from a certified act of terrorism, that insurer would have been eligible for a federal share of compensation amounting to $270 million.68 However, if in 2005 an insurer with $1 billion of DEP (as of 2004) incurred $400 million of losses from a certified act of terrorism, that insurer would have been eligible for a lesser federal share of compensation, amounting to $225 million.69 Similarly, if in 2010 an insurer with $1 billion of DEP (as of 2009) incurred $400 million of losses from a certified act of terrorism, that insurer would have been eligible for a share of federal compensation of only $170 million.70 Finally, if in 2010 an insurer with DEP (as of 2009) of $2 billion incurred $400 million of losses from a certified act of terrorism, that insurer would not have been eligible for federal payments under TRIP, because its losses would not have exceeded the applicable deductible.71

65 TRIA § 3(c).
66 TRIA § 103(e)(1)(B)(ii).
67 Id.
68 Insurer deductible was 10% of DEP, or $100 million. The federal share in 2004 was 90 percent of losses exceeding the insurer deductible (0.90 * [$400 million − $100 million] = $270 million).
69 Insurer deductible was 15% of DEP, or $150 million. The federal share in 2005 was 90 percent of losses exceeding the insurer deductible (0.90 * [$400 million − $150 million] = $225 million).
70 Insurer deductible was 20% of DEP, or $200 million. The federal share in 2010 was 85 percent of losses exceeding the insurer deductible (0.85 * [$400 million − $200 million] = $170 million).
71 Insurer deductible was 20% of DEP, or $400 million. The federal share in 2010 was 85 percent of losses exceeding the insurer deductible (0.85 * [$400 million − $400 million] = 0).
Figure 1 illustrates how the insurer co-participation share and deductible have increased from 2002 to the present.

**Figure 1: TRIA Coinsurance & TRIA Deductible Increases**

![Graph showing increases in TRIA coinsurance and deductible from 2002 to 2007-2014.]

*Source: Comment to the PWG Notice from Aon plc (September 2013)*

### b. Limit on Aggregate Annual Liability

For certified acts of terrorism, TRIA limits the ultimate exposure of insurers under TRIP-eligible lines and of the federal government for payments to insurers under TRIP. Specifically, TRIA prohibits the Secretary from making payments for any portion of aggregate insured losses from acts of terrorism which exceed the “Program Cap” of $100 billion during a Program Year. Moreover, an insurer that meets its insurer deductible under TRIP is not liable for any portion of losses that exceed the Program Cap. TRIA requires the Secretary to determine the pro rata share of insured losses to be paid by each affected insurer and to notify Congress in the event that insured losses under TRIP exceed the Program Cap.

### c. Recoupment of Federal Payments under TRIP

In the event that federal payments are made to insurers under TRIP, TRIA authorizes the Secretary to collect “terrorism loss risk-spreading premiums” from insurers. Insurers are required to collect such premiums from policyholders as a surcharge on insurance policies for TRIP-eligible lines of insurance after the Program Year in which federal payments are made, and to remit them to the Secretary. The requirement to collect terrorism loss risk-spreading premiums and remit such amounts collected to Treasury is not limited to insurers that received federal payments under TRIP, but rather applies to all insurers of TRIP-eligible lines.

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72 TRIA § 103(e)(2)(A).
73 Id.
74 TRIA §§ 103(e)(2)-(3).
75 TRIA § 103(e)(7).
76 TRIA § 103(e)(8)(A), (B).
77 Id.
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Collection by the Secretary of such terrorism loss risk-spreading premiums is either mandatory or discretionary, depending on the amount of federal payments made under TRIP and the total insured losses from certified acts of terrorism during a Program Year. If “uncompensated insured losses” (i.e., the total insured losses less federal payments) do not exceed the “insurance marketplace aggregate retention amount” (i.e., a minimum amount of insured losses, depending on the aggregate amount of insured losses, that must ultimately be paid by the private markets), TRIA requires the collection of terrorism loss risk-spreading premiums.

The insurance marketplace aggregate retention under TRIA is equal to the lesser of aggregate insured losses from acts of terrorism during a Program Year and retention amounts established in the law, which have increased over time: $10 billion for 2003; $12.5 billion for 2004; $15 billion for 2005; $25 billion for 2006; and $27.5 billion for 2007 and each Program Year thereafter. The “mandatory recoupment amount” is the difference between the insurance marketplace aggregate retention amount and uncompensated insured losses. TRIA also authorizes the Secretary to recoup an additional amount of the federal financial assistance above the mandatory recoupment amount. TRIA currently requires the Secretary to collect an amount equal to 133 percent of the mandatory recoupment amount.

Accordingly, the minimum recoupment amount that the Secretary would have been required to collect from insurers after a Program Year has steadily increased over the years since the enactment of TRIA. To illustrate, if insured losses from acts of terrorism had totaled $40 billion in 2005, and if $20 billion of federal payments had been made under TRIP, then mandatory recoupment would not have occurred. Any recoupment of the $20 billion federal payment would have been discretionary. On the other hand, if insured losses from acts of terrorism had totaled $40 billion in 2010, and if $20 billion of federal payments had been made under TRIP, then recoupment of 133 percent of $7.5 billion of the federal payments (i.e., $10 billion) would have been mandatory. Recoupment of any of the remaining $12.5 billion of federal payments would have been discretionary.

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78 TRIA § 103(e)(6).
79 TRIA § 103(e)(7).
80 TRIA § 103(e)(7)(D).
81 TRIA § 103(e)(7)(C).
82 Twenty billion dollars of uncompensated insured losses would have exceeded the insurance marketplace aggregate retention amount for 2005 (the lesser of $15 billion or total insured losses of $40 billion).
83 The mandatory recoupment amount of $7.5 billion equals the insurance marketplace aggregate retention amount for 2010 (the lesser of $27.5 billion or total insured losses of $40 billion) less the uncompensated insured losses ($20 billion). Under TRIPRA the Secretary would have been required to collect 133 percent of the mandatory recoupment amount (1.33 * $7.5 billion = $10 billion).
d. Summary

Figure 2 summarizes the TRIP coverage mechanism for certified acts of terrorism satisfying the $5 million certification requirement.

**Figure 2: TRIP Summary Illustration**

In the event of a certified act of terrorism that exceeds the $100 million Program Trigger, TRIA makes available a federal share of compensation to insurers with qualifying losses in excess of applicable deductibles, calculated based on prior year premiums for TRIP-eligible lines. Federal payments to an insurer under TRIP equal 85 percent of the portion of insured losses exceeding the insurer’s deductible during a Program Year.

The Program Cap is $100 billion of aggregate insured losses. TRIA does not permit the Secretary to authorize payments for any portion of losses over that figure, and an insurer that has met its deductible is not liable for any portion of losses exceeding the Program Cap.

The Secretary is required to recoup federal payments made under TRIP which exceed a mandated industry retention through collection of terrorism loss risk-spreading premiums charged by insurers on TRIP-eligible lines. If uncompensated insured losses do not exceed the insurance marketplace aggregate retention amount, the Secretary is required to collect 133 percent of the difference. The insurance marketplace aggregate retention amount is the lesser of total insured losses from certified acts of terrorism or $27.5 billion. Recoupment of federal payments that exceed the mandatory recoupment amount is subject to the discretion of the Secretary. As of this Report, a payment has never been made through TRIP.
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III. AVAILABILITY AND AFFORDABILITY OF TERRORISM RISK INSURANCE

For purposes of this Report, the PWG relied on information provided in comments submitted in response to the PWG Notice, including the results provided therein of surveys conducted by two large insurance brokerage firms, as well as on consultations with a range of stakeholders.84

In 2005, Treasury issued a report to Congress assessing TRIA, which was based in part on survey data Treasury collected from insurers and policyholders via an independent research firm.85 Through those surveys, Treasury evaluated the effectiveness of TRIP, evaluated the likely capacity of the P/C industry to offer insurance for terrorism risk after the then-scheduled termination of TRIP, and addressed the availability and affordability of such insurance for various policyholders, including railroads, trucking, and public transit.

In this section, findings from the 2006 PWG Report and the 2010 PWG Report are briefly summarized. Various factors affecting the long-term availability and affordability of insurance for terrorism risk are then discussed, including market indications relating to the scheduled expiration of TRIA in December 2014. Finally, industry metrics with respect to the availability and affordability of insurance for terrorism risk are reviewed.

A. Findings of the PWG’s 2006 and 2010 Reports to Congress

The PWG reported the following key findings in 2006:86

• The availability and affordability of terrorism risk insurance improved from 2001 to 2006, despite the statutory increases in insurer retentions during that period under TRIA. Insurers allocated additional capacity to terrorism risk, prices declined, and take-up rates increased. Terrorism risk insurance take-up rates grew from 30 percent in 2002 to approximately 60 percent in 2006.

• Improvements in the terrorism risk insurance market were due to several important factors including: better risk measurement and management, improved modeling, greater reinsurance capacity, and the recovery in the financial condition of property and casualty insurers.

• Take-up rates increased as prices fell, but a significant proportion of policyholders still did not purchase terrorism coverage by 2006.

• Further improvements in insurers’ ability to model and manage terrorism risk likely would have contributed to the long-term development of the terrorism risk insurance market. The high level of uncertainty associated with predicting the frequency of terrorist attacks and a general unwillingness by a significant number of insurance policyholders to purchase insurance coverage, made any prediction of the potential degree of long-term development of the terrorism risk insurance market difficult.

• Coverage for terrorism risk in group life insurance policies remained generally available and at affordable prices, despite that group life insurance has not been part of TRIP.

• Insurers generally did not provide coverage for losses resulting from nuclear, biological, chemical, and radiological (NBCR) events even before 9/11, and for the most part were not providing NBCR coverage even with a federal backstop in place. Given the general reluctance of insurers to provide coverage for these types of risks, limited capacity, relatively high prices, and policyholder expectations, little potential

84 Among others, staff consulted with representatives from the insurance regulatory departments of Massachusetts, New York, and California, as well as from the NAIC. Staff also consulted with various consumer advocates, insurers, reinsurers, commercial insurance policyholders, trade associations, and industry services providers.


86 PWG 2006 Report.
for future market development appeared to exist. Subsequently, the Government Accountability Office (GAO) found that available capacity for NBCR terrorism risk insurance and reinsurance was limited.\textsuperscript{87}

The PWG reported the following key findings in 2010:\textsuperscript{88}

- The availability and affordability of terrorism risk insurance provided by the private sector had improved since 2006, and insurers had built capital and increased aggregate capacity.
- Overall, aggregate terrorism risk insurance capacity had increased, and significantly in some forms. Nevertheless, capacity was constrained in some markets (e.g., high-risk geographic locations and properties), and some commercial insurance policyholders in high-risk urban areas had difficulty obtaining coverage with sufficient limits.
- Improvements in the terrorism risk insurance market may have occurred due to improvements in modeling and managing accumulation and concentration of aggregate loss exposure; new market entrants and increased competition; and improved capital positions of the property and casualty insurance and reinsurance industries. The industry was developing a better understanding of aggregate risk for the peril of terrorist attacks, and the increased capacity and competition had resulted in decreases in price generally.
- Take-up rates among commercial insurance policyholders reached approximately 60 percent in 2006, but remained roughly flat through 2010. Among those commercial insurance policyholders taking up terrorism risk insurance, some indications suggested that more coverage, as measured by policy limits, was being purchased.
- Market participants (policyholders, insurers, and reinsurers) remained uncertain about the ability of models to predict the frequency and severity of terrorist attacks. Such views influenced policyholder perception of risk and purchase decisions, as well as insurer and reinsurer capacity allocations to support terrorism risk coverage.

As described in sections III.C and III.D, the availability and affordability of terrorism risk insurance through 2013 are largely comparable to the findings the PWG reported in 2010.

B. Factors Affecting the Long-Term Availability and Affordability of Terrorism Risk Insurance

The availability and affordability of insurance for terrorism risk depends on a variety of factors, and appears to have been substantially influenced by TRIA. Comments submitted in response to the PWG Notice identified several factors affecting availability and affordability, certain of which are discussed below.

1. Ability of Insurers to Estimate Frequency and Severity

According to commenters, a significant challenge to pricing terrorism risk is the lack of credible empirical historical data on which to base loss projections and pricing.\textsuperscript{89} When empirical historical data are not available, insurers often rely on commercial catastrophe risk models to price risk (e.g., for other low-frequency, high-severity

\textsuperscript{87} GAO 2008 Report at 14.
\textsuperscript{88} PWG 2010 Report.
\textsuperscript{89} Comment to the PWG Notice from the American Insurance Association, 5 (September 2013) (distinguishing the data that are available to insurers for pricing terrorism risk from the data that are available for pricing natural catastrophe risk); Reauthorizing TRIA: The State of the Terrorism Risk Insurance Market, Hearing before the S. Comm. on Banking, Housing, & Urban Affairs, 113th Cong. (September 25, 2013) (statement from Robert P. Hartwig, Ph.D., CPCU, Insurance Information Institute, at 19), available at http://www.banking.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=b9077dbb-2ae2-425a-89dd-793fe049190&Witness_ID=8f726a39-e80f-412f-9672-7af49e64f47 (explaining that insurers do not have data with which to estimate the frequency of terrorist attacks).
perils such as earthquakes, floods, and severe storms). These models simulate the frequency and severity of catastrophic events over a period of many years, and estimate the damage and financial effects of such damage on a given set of insured exposures.

Terrorism risk models have become more advanced in the past twelve years, and today consider a spectrum of potential targets and weapons and incorporate expertise from counterterrorism and law enforcement professionals when available. These models offer insurers additional tools to evaluate accumulations of exposures and probable maximum losses within areas affected by potential attacks. Nonetheless, commenters report that such models are still of relatively limited utility, particularly in terms of developing pricing for the risk of large-scale attacks with a sufficient degree of confidence.

Aon describes modeling of terrorism risk as “a means for underwriters to measure how much limit [an insurer has] at risk in a given geographic area – nothing more, nothing less.” Among others, the following impediments to more robust modeling of terrorism risk have been identified to the PWG:

- Lack of sufficient experience and historical information by which to validate a model (frequency);
- Unique nature of terrorism risk;
- Geographic concentration of terrorism risk (proximity of insured assets to perceived “targets”);
- Diversity of potential weapons scenarios;
- Number of potential targets; and
- Insufficient exposure data.

2. Potential for Catastrophic Losses

Insurers have exhibited reluctance to offer coverage for terrorism risk if the associated losses cannot be predicted and may be unlimited. TRIP limits an insurer’s exposure by sharing the risk of insured losses that could exceed the insurer deductible and capping the aggregate liability of insurers and the federal government at $100 billion.

An essential objective for any insurer is to limit the possibility that a single event could result in insured losses that threaten its solvency or otherwise bear on its ability to pay future claims and write new business. Thus, an insurer estimates and takes action to limit its probable maximum loss (PML) relating to any single event. An insurer may reduce its exposure to an unacceptable PML by canceling insurance policies for some exposures, particularly if sufficiently reliable loss estimates cannot be made.


91 See, e.g., Comment to the PWG Notice from Liberty Mutual Insurance, 3 (September 2013); Comment to the PWG Notice from the Property Casualty Insurers Association of America, 1 (September 2013); Reauthorizing TRIA: The State of the Terrorism Risk Insurance Market, Hearing before the S. Comm. on Banking, Housing, & Urban Affairs, 113th Cong. (September 25, 2013) (statement from Robert P. Hartwig, Ph.D., CPCU, Insurance Information Institute, at 19), available at http://www.bankingsenate.gov/public/index.cfm/FuseAction=Hearings.Testimony&Hearing_ID=b9077dbb-2ae2-425a-89dd-793fc8049190&Witness_ID=8f726a39-e80f-412f-9672-7a9e49e64f7 (stating that terrorism risk models can predict the severity but not the frequency of insured losses from acts of terrorism); but see The Terrorism Risk Insurance Act of 2002: Hearing before the H. Comm. on Financial Services, 113th Cong. (September 19, 2013) (statement from Dr. Gordon Woo, Catastrophist, Risk Management Solutions Inc., at 1), available at http://financialservices.house.gov/uploadedfiles/hhrg-113-ba00-wstate-gwoo-20130919.pdf (stating that “terrorism insurance risk modeling has attained a level of capability”).

92 Comment to the PWG Notice from Aon plc, 16 (September 2013).

93 Id.
The American Academy of Actuaries has developed several estimates of insured losses from large-scale NBCR attacks in various U.S. locations, including a $778 billion estimated loss which could result from a potential NBCR terrorist attack in New York City. In certain “Tier 1” urban centers in the United States, such as Manhattan, the potential for catastrophic losses from an act of terrorism could significantly limit the ability of the private market to make insurance for terrorism risk available in the absence of a federal program such as TRIP.

3. Insurer Policyholder Surplus

An insurer’s policyholder surplus is the excess of its assets over its liabilities, as measured on an accounting basis prescribed by state insurance regulators. The relevant state insurance regulator and credit rating agencies (CRAs) monitor the surplus level of an insurer relative to its portfolio of risks as a principal indicator of its solvency. Greater surplus allows an insurer to absorb unexpectedly large insured losses or to write additional business. Aggregate policyholder surplus is one indicator of the amount of coverage that the insurance industry can make available.

The aggregate policyholder surplus of the U.S. P/C insurance industry increased from $295 billion in 2002 to $597 billion in 2012. The aggregate premium-to-surplus ratio declined from 1.38 in 2002 to 0.88 in 2012, meaning the industry decreased its leverage. Some commenters argue that the substantial growth in aggregate surplus is evidence that the private market is now positioned to insure terrorism risk. Further reauthorization of TRIP, such commenters conclude, would amount to unnecessary federal assistance to a financially sound insurance industry.

Notwithstanding the growth in aggregate industry surplus, insurance industry commenters argue that current insurer exposures to terrorism risk are significant, relative to individual insurer surplus levels. These commenters report that, for many insurers, exposure to terrorism risk would be too large, relative to surplus, in the absence of reinsurance through private markets or support through TRIP. Notably, exposure to terrorism risk is not a factor in the state regulatory method of measuring the minimum amount of required capital for insurers.

Seventy-three of the approximately 900 insurers reporting DEP for TRIP-eligible lines have surplus levels that exceed $1 billion. These 73 insurers account for approximately 76 percent of the market for TRIP-eligible lines of insurance in terms of premium volume. One hundred fifteen insurers (approximately 83 percent of the market by DEP for TRIP-eligible insurance) have surplus levels that exceed $500 million, and 282 insurers (approximately 93 percent of the market) have surplus levels that exceed $100 million. The remaining insurers, accounting for approximately 7 percent of the market, have surplus levels of less than $100 million.

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94 Comment to the PWG Notice from the American Academy of Actuaries, 2-3 (September 2013). See also Comment to the PWG Notice from Liberty Mutual Insurance, 2-3 (September 2013) (referencing modeled terrorist events that exceed $750 billion of insured losses, including modeled anthrax attacks that exceed $900 billion of insured losses).
96 Aggregate property and casualty sector premium was $407 billion in 2002, relative to $295 billion of aggregate surplus. Aggregate premiums were $524 billion in 2012, relative to $597 billion of aggregate surplus. SNL Financial, U.S. Insurance Statutory, P/C Industry Briefing Books – Balance Sheet, Income Statement (September 2013).
97 See, e.g., Comment to the PWG Notice from the Cato Institute, 12-13 (September 2013).
98 Id. at 14.
99 See, e.g., Comment to the PWG Notice from the American Insurance Association, 14-15 (September 2013).
100 Id.
101 SNL Financial LC (November 2013) (aggregating DEP for TRIP-eligible lines of insurance, in addition to Policyholder Surplus, as reported for 2012). “Insurers” in this case are identified at the “SNL Groups” level (i.e., insurance groups, as opposed to legal entities).
To some degree, growth in aggregate industry surplus is countered by the increase in the industry’s exposure to unreimbursed losses from acts of terrorism as TRIA has evolved. As described above, the insurer deductible has increased from 7 percent in 2003 to 20 percent today.

Among the approximately 900 insurers with DEP for TRIP-eligible lines, the median insurer deductible represented as a percent of surplus is approximately 8 percent. However, 179 insurers, accounting for approximately 21 percent of the market by premium volume, have TRIA deductibles that exceed 20 percent of surplus.

In addition, the federal share of compensation to insurers for losses exceeding the deductible was lowered from 90 percent to 85 percent in the 2005 reauthorization, effective January 1, 2007. Insurers estimate that the potential insured losses that would not be compensated by federal payments average between 8 and 12 percent of policyholder surplus. Insurers expect that exposure to terrorism risk of many insurers would “double or triple and leave exposures in excess of 20 percent of total surplus” if TRIP is not reauthorized.

4. Credit Rating Agency Considerations

CRAs rate insurers based on quantitative and qualitative assessments, including exposure to losses from natural catastrophes or acts of terrorism. A.M. Best, for example, considers an insurer’s aggregate exposure, number of insured locations, and concentration of exposures within certain locations. Given these factors, A.M. Best evaluates an insurer’s exposure to losses from a terrorist attack, the effect such losses would have on the insurer’s surplus, and the ability the insurer would have to pay additional, expected claims after such losses. A.M. Best reports that insurers “with more concentrations — that are in excess of 20 [percent] of surplus prior to any recoveries from a federal backstop – are at a greater risk than [insurers] with fewer insured concentrations.”

Commercial viability of insurers is influenced by credit ratings. Policies offered by a lower rated insurer may be less viable or attractive in the marketplace, and therefore, insurers prefer to achieve higher ratings. CRAs are taking steps that may lead to downgrades of insurers if and when TRIA expires; this may have adverse implications for the availability and affordability of terrorism risk insurance.

For example, in 2013, A.M. Best assessed insurers’ exposures to terrorism risk in the absence of TRIP, and asked some insurers to present action plans “detailing the steps they will take to reduce concentration of exposure to terrorism risk, should [TRIA] protection change materially.” Any such insurer that did not present a sufficient plan likely would have been subjected to negative rating pressure by A.M. Best. In December 2013, A.M. Best reported that all such insurers presented action plans for reducing exposure to terrorism risk in the event that TRIA is not renewed, and that, therefore, negative rating actions were not taken. Subsequent to this exercise A.M. Best remains concerned with TRIA's potential expiration, and notes that it will continue

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102 Comment to the PWG Notice from the American Insurance Association, 14 (September 2013).
103 Id. at 15.
105 Id. at 5.
106 A.M. Best, Future of TRIPRA Remains Uncertain, Rating Pressure Intensifies, 1 (October 9, 2013), available at http://www3.ambest.com/DisplayBinary/DisplayBinary.aspx?TY=P&record_code=217533&URatingId=2421524. A.M. Best’s assessment included a stress test of insurers’ balance sheets, which simulated the result of a conventional terrorist attack “similar to a five- or six-ton TNT truck bomb.” Those insurers that failed the stress test, under the assumption that TRIP did not exist, were asked to present plans for reducing exposure to terrorism risk in the event that TRIA expires.
107 Id.
to monitor insurers’ exposures to terrorism risk and “will be prepared to take appropriate rating actions where necessary.”

5. Private Reinsurance Capacity

Reinsurance is a mechanism by which insurers transfer, or “cede,” portions of risk exposures to other insurers (reinsurers) in exchange for a premium. Reinsurance serves a number of functions for a primary insurer, including allowing it to offer coverage for large exposures, protect policyholder surplus, and stabilize loss experience. Reinsurance increases the capacity of the primary insurance market (i.e., the amount of coverage that insurers can make available) by providing access to additional capital.

The availability of reinsurance is particularly important to primary insurers covering terrorism risk because of the potential for catastrophic losses. The unwillingness of reinsurers to offer affordable coverage for terrorism risk in the aftermath of 9/11 contributed to the unavailability of coverage for terrorism risk in the primary insurance market. Currently, and in the absence of reinsurance or other sources of funding for terrorism risk in the private sector, TRIP provides a level of protection to primary insurers, which preserves the availability of private capital for terrorism risk insurance on affordable terms.

Although a private reinsurance market for terrorism risk exists, the market is supported by limited capital and coverage has not been available in amounts approaching that afforded under TRIP. According to some industry estimates, as little as $6 to $8 billion of global reinsurance coverage is available for terrorism risk in the United States. Moreover, the scope of coverage available from the private reinsurance market has been narrower in comparison to coverage available through TRIP. For example, private reinsurance may not cover losses caused by NBCR attacks, even though such losses may not be excluded from insurers’ workers’ compensation policies. Private market reinsurance for terrorism risk has typically limited coverage to acts carried out by foreign persons, whereas a certified act of terrorism under TRIA is not subject to that limitation.

Figure 3, which was submitted with testimony before the House Committee on Financial Services by Marsh, shows estimated North American reinsurance dedicated capital of $100 billion; however only a fraction of this is presently available to support terrorism risk.

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109 Id. A.M. Best also noted that its stress test “was not meant to be a worst-case scenario.” Id.


111 See Comment to the PWG Notice from Marsh, 8 (September 2013) (“the industry is not adequately capitalized to support such exposure”).

112 Comment to the PWG Notice from Aon plc, 30 (September 2013).

In connection with Figure 3, Marsh commented to the Committee:

It is important to note, however, that not all capital is dedicated to or capable of writing terrorism coverage. While alternative, or “capital markets,” providers have brought substantial reinsurance capacity into the industry, most have little to no appetite for the peril. Some are forced to decline on the basis of legal obligations made to their investors, whereas others simply avoid the exposure on the grounds of correlations with financial markets risk.\footnote{Id. at 6.}

Marsh estimates that $1 to $2 billion of capacity for terrorism coverage is currently available from private reinsurance markets, and that capacity is likely smaller in major metropolitan areas due to concentration of risk;\footnote{Comment to the PWG Notice from Aon plc, 30-31. Aon also reports that “[r]einsurers have grown slightly more comfortable with the exposure, and capacity has increased .... Nevertheless, the inability to assign frequencies to the occurrence of terrorism events makes the value proposition for buyers difficult to assess.” Id. at 31.} the amount of coverage available is also more limited if NBCR coverage is not excluded.\footnote{Comment to the PWG Notice from Marsh, 10 (September 2013).} The cost of standalone terrorism reinsurance may be 1 to 4 percent of the limits purchased in “non-target, lightly populated regions,” but in “target cites and/or densely populated commercial centers,” the cost may be 15 percent of the reinsurance limit or more.\footnote{Comment to the PWG Notice from Marsh, 10 (September 2013).}

The largest modeled conventional terrorist attack (involving a truck bomb detonation in Manhattan) produced an estimated insured loss of approximately $38 billion, while a nuclear detonation in Manhattan could produce a loss approaching $950 billion.\footnote{Id. As indicated above, the American Academy of Actuaries also has reported several estimates of insured losses, including a $778 billion estimated loss resulting from a potential NBCR terrorist attack in New York City. Comment to the PWG Notice from the American Academy of Actuaries, 2-3 (September 2013). See also Comment to the PWG Notice from Liberty Mutual Insurance, 2-3 (September 2013).} To the extent covered by insurance, commenters note that such losses would overwhelm the industry in the absence of federal support.\footnote{See, e.g., Comment to the PWG Notice from Liberty Mutual Insurance, 2-3 (September 2013); Comment to the PWG Notice from the Reinsurance Association of America, 3 (September 2013); TRIA at Ten Years: The Future of the Terrorism Risk Insurance Program, Hearing before the H. Comm. on Financial Services Subcommittee on Housing and Insurance, 112th Cong. (September 11, 2012) (statement of Edward B. Ryan, Aon Benfield, at 3).}
As mentioned by Marsh, recent capital market developments have added a new dynamic to the private reinsurance market with minimal impact in the terrorism risk insurance sector. Investment capital, including from hedge funds and pension funds, has added new reinsurance capacity, including through insurance linked securities (ILS) such as catastrophe bonds. Although this development in ILS markets has made P/C reinsurance more available and affordable, insurers report that ILS transactions have not offered coverage for terrorism risk.\(^{120}\)

### 6. Market Uncertainty Relating to the Reauthorization of TRIP

In the timeframe leading up to the previous scheduled TRIA expirations, pricing for terrorism risk insurance spiked. This can be seen on Figure 6 in section D.1 below. Figure 6 also shows a recent upward pricing trend.\(^{121}\) Aon’s comment to the PWG Notice states:

> It is expected that pricing volatility will increase throughout the balance of 2013 and will become particularly acute in [the fourth quarter of 2013], as major insurance contracts come up for renewal in 2014 with a portion of the contract extending beyond the end of 2014, and TRIA’s scheduled expiration on 12/31/2014.\(^{122}\)

Aon’s view, supported by others, is that “the insurance market has repeatedly signaled that it will not offer the same level of terrorism coverage”\(^{123}\) mandated by TRIP if its government backstop is not in place. Proponents of a long-term reauthorization argue that insurance for terrorism risk would not be available or affordable in the absence of TRIP. These proponents include a broad range of stakeholders, including insurers, reinsurers, insurance agents and brokers, policyholders, state legislators and regulators, some insurance consumer advocates, and academics. Insurers, reinsurers, and agents and brokers acknowledge the developments in the market from 2002 to 2013, but warn that insurers would again exclude coverage of losses from acts of terrorism if TRIP is not reauthorized. State insurance regulators echo industry views and also expect that an availability crisis would result.\(^{124}\) State legislators express concern regarding the adverse effects that such unavailability would have on state economies.\(^{125}\)

Despite the adverse effects of uncertainty regarding the potential reauthorization of TRIP on the availability and affordability of terrorism risk insurance, as expressed by a range of stakeholders, support for a long-term reauthorization of TRIP is not unanimous. Some public policy organizations, including the Cato Institute, Taxpayers for Common Sense, and certain insurance consumer representatives, such as the Consumer

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\(^{120}\) Comment to the PWG Notice from the American Insurance Association, 20 (September 2013). Capital markets-linked reinsurance vehicles have been primarily dedicated to weather risks and to date represent approximately $45 billion of capacity worldwide. Aon Benfield, *Reinsurance Market Outlook: Post Convergence – The Next USD100 Billion* (September 2013).

\(^{121}\) The graph shows in part “insurance markets beginning to adjust their portfolios of risk to manage the potential expiration of TRIA.” Comment to the PWG Notice from Aon plc, 6 (September 2013).

\(^{122}\) *Id.* at 7.

\(^{123}\) *Id.* at 6.

\(^{124}\) Comment to the PWG Notice from the New York Department of Financial Services (September 2013); Comment to the PWG Notice from the National Association of Insurance Commissioners (September 2013).

\(^{125}\) Comment to the PWG Notice from the National Council of Insurance Legislators (September 2013).
Federation of America, comment that TRIA should expire. \(^{126}\) These commenters assert that insurance for terrorism risk would still be available and affordable in the absence of a federal program that mandates coverage and limits insurer exposure. One commenter argues that insurers would have a strong incentive to offer insurance for terrorism risk in the absence of a federal backstop because failing to do so would risk losing policyholders (i.e., to other insurers that are willing to make coverage available). \(^{127}\) Another commenter argues that TRIP “crowds out” what would otherwise be a vibrant private reinsurance market for terrorism risk by offering coverage at no cost. \(^{128}\)

### C. Availability of Terrorism Risk Insurance

The availability of insurance for terrorism risk refers to whether insurers offer coverage for losses arising from an act of terrorism. Availability of insurance for terrorism risk typically is evaluated by measuring the available capacity in the private insurance market. Capacity refers to the maximum amount of coverage (i.e., the limit) that an insurer is willing to make available, and often is measured in terms of limit per insured risk exposure (i.e., per-risk). A common practice in analyzing the capacity available in the private insurance market is to aggregate the per-risk limits that insurers are willing to offer. This approach may overestimate the amount of actual capacity available in the market, but it serves as a useful benchmark when considering year-over-year trends.

Insureds most commonly purchase terrorism risk insurance by accepting the offer, required of insurers by TRIA, in insurance contracts for TRIP-eligible lines. This market for terrorism risk insurance is called the “embedded” market because the coverage for terrorism risk is included in a broader policy. The foundation of the embedded market, therefore, is TRIA itself. Embedded terrorism coverage is offered on terms that do not differ materially from those of other coverages, in accordance with TRIA. A relatively small market also exists for specialized “standalone” insurance policies covering terrorism risk, which is described below.

#### 1. Embedded Market

Policyholders of insurance for terrorism risk overwhelmingly purchase coverage that is “embedded” in TRIP-eligible commercial P/C insurance policies. Marsh and Aon report that 95 percent\(^{129}\) and 80 percent\(^{130}\) of clients that purchased some form of terrorism risk insurance protection for property risks, respectively, did so through the embedded market. The standalone market, discussed below, is an important complement to the embedded market.

\(^{126}\) See Comment to the PWG Notice from the Cato Institute (September 2013); The Terrorism Risk Insurance Act of 2002: Hearing before the H. Comm. on Financial Services, 113\(^{th}\) Cong. (September 19, 2013) (statement from Steve Ellis, Vice President, Taxpayers for Common Sense), available at http://financialservices.house.gov/uploadedfiles/hhrg-113-ba00-wstate-sellis-20130919.pdf. Staff consulted with the Consumer Federation of America (CFA) regarding TRIA. Although the CFA did not submit a comment in response to the PWG Notice, the PWG understands that its views are consistent today with its earlier reports advocating TRIA’s expiration. See, e.g., Consumer Federation of America, Weaning the Insurance Industry and Large Commercial Policyholders from Taxpayer Subsidies under the Terrorism Risk Insurance Act (July 26, 2005), available at http://www.consumerfed.org/elements/www.consumerfed.org/file/finance/TRIA_Report_072605.pdf.

\(^{127}\) Comment to the PWG Notice from the Cato Institute, 13 (September 2013).


\(^{129}\) Marsh 2013 Report at 10.

\(^{130}\) Comment to the PWG Notice from Aon plc, 9 (September 2013).

\(^{131}\) SNL Financial LC (November 2013).
for TRIP-eligible lines in 2012, fourteen insurers accounted for 50 percent of the market DEP; 58 insurers accounted for 80 percent of the market DEP; and 376 insurers constituted 99 percent of the market DEP.132

Estimates of the capacity in the embedded market are approximately $14 billion of coverage on a per-risk basis, a moderate increase from the $13.5 billion estimate provided in the 2010 PWG Report.133 Less capacity may be available in areas prone to natural catastrophe perils.134 For example, terrorism risk insurance capacity for policyholders also requiring protection from catastrophic perils such as hurricanes, earthquakes, and floods may drop to between $2 and $4 billion.135

2. Standalone Market

For some insureds, the embedded market is not sufficient to meet coverage needs for terrorism risk. For insureds with the highest risk profiles in particular, “standalone” insurance policies can provide additional or alternative terrorism risk insurance coverage. Such coverage generally is written on customized terms, and is outside the scope of TRIA’s coverage mandate and provisions for a government share of loss exposure.136 For example, standalone policies may provide coverage of non-certified acts of terrorism, or coverage limits that are higher than those available in embedded policies. Standalone terrorism risk insurance typically is sold to policyholders with large or complex exposures that may be perceived as being more susceptible to losses from acts of terrorism.

The cost of standalone terrorism risk insurance can be as much as five to ten times that of embedded (TRIP-eligible) coverage.137 Even with the ability to charge higher rates, insurers continue to limit available coverage, particularly in high-risk locations.138 The tables in Figures 4 and 5 indicate the capacity that may be available from insurers writing standalone terrorism risk insurance.

132 SNL Financial LC (November 2013) (aggregating DEP for TRIP-eligible lines of insurance, as reported for 2012). “Insurers” in this case are identified at the “SNL Groups” level (i.e., insurance groups, as opposed to legal entities).
133 Comment to the PWG Notice from Aon plc, 8 (September 2013); PWG 2010 Report at 15.
134 Comment to the PWG Notice from Aon plc, 8 (September 2013).
135 Id.
136 Id. Standalone coverage may also be accessed via reinsurance. See Comment to the PWG Notice from Aon plc, 6 (September 2013).
137 Marsh 2013 Report at 19.
138 Id.
The Long-Term Availability and Affordability of Insurance for Terrorism Risk

**Figure 4: Standalone Terrorism Insurance Market Capacity**

<table>
<thead>
<tr>
<th>Underwriter</th>
<th>Normal ($) maximum Line</th>
<th>Absolute ($) maximum Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various Syndicates at Lloyd’s</td>
<td>925,000,000</td>
<td>1,195,000,000</td>
</tr>
<tr>
<td>AIG / Lexington</td>
<td>100,000,000</td>
<td>250,000,000</td>
</tr>
<tr>
<td>Arch Insurance Company (Europe) Ltd</td>
<td>5,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Ace European</td>
<td>50,000,000</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Axis Specialty</td>
<td>150,000,000</td>
<td>200,000,000</td>
</tr>
<tr>
<td>Hannover Rückversicherungs-Aktiengesellschaft</td>
<td>15,000,000</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Hiscox USA</td>
<td>100,000,000</td>
<td>100,000,000</td>
</tr>
<tr>
<td>Lancashire Insurance Company UK Ltd</td>
<td>100,000,000</td>
<td>200,000,000</td>
</tr>
<tr>
<td>Montpelier Re</td>
<td>50,000,000</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Validus/Talbot US</td>
<td>100,000,000</td>
<td>100,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,595,000,000</strong></td>
<td><strong>2,200,000,000</strong></td>
</tr>
<tr>
<td>National Indemnity Company</td>
<td>500,000,000</td>
<td>1,000,000,000</td>
</tr>
<tr>
<td><strong>Total incl Berkshire</strong></td>
<td><strong>2,095,000,000</strong></td>
<td><strong>3,200,000,000</strong></td>
</tr>
</tbody>
</table>

Source: Comment to the PWG Notice from Aon plc (September 2013)

**Figure 5: Standalone Terrorism Insurance Market Capacity (in $Millions)**

<table>
<thead>
<tr>
<th>INSURER/REINSURER</th>
<th>CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chartis</td>
<td>$1,500</td>
</tr>
<tr>
<td>Berkshire Hathaway</td>
<td>$1,000</td>
</tr>
<tr>
<td>Lloyd’s</td>
<td>$900</td>
</tr>
<tr>
<td>Lancashire Insurance Group</td>
<td>$200</td>
</tr>
<tr>
<td>AXIS Specialty</td>
<td>$150</td>
</tr>
<tr>
<td>Hiscox USA</td>
<td>$100</td>
</tr>
<tr>
<td>Validus</td>
<td>$100</td>
</tr>
<tr>
<td>Western Re</td>
<td>$85</td>
</tr>
<tr>
<td>ACE Global Markets</td>
<td>$50</td>
</tr>
<tr>
<td>Montpelier Re</td>
<td>$50</td>
</tr>
<tr>
<td>Transatlantic Re</td>
<td>$50</td>
</tr>
<tr>
<td>Beazley US</td>
<td>$50</td>
</tr>
<tr>
<td>Torus</td>
<td>$40</td>
</tr>
<tr>
<td>IRI/Westport</td>
<td>$40</td>
</tr>
<tr>
<td>Aspen Re</td>
<td>$30</td>
</tr>
<tr>
<td>Inter Hannover</td>
<td>$25</td>
</tr>
</tbody>
</table>

Source: Marsh 2013 Report (May 2013)

The amount of coverage for terrorism risk offered by the standalone market is influenced by a number of factors and can decrease to $750 million or less in high-risk locations.139 Bermuda and European insurers (or U.S. subsidiaries), including Lloyd’s of London, contribute significantly to standalone terrorism risk insurance capacity in the United States.140

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139  *Id.*
140  *See id.* at 11.
The standalone terrorism risk insurance market has grown following 9/11 and the passage of TRIA. The market’s current per-risk capacity is more than twice the 2006 capacity of $685 million per-risk. Per-risk capacity has increased for several reasons, including the availability of new capital to the market, and the profitability of the standalone terrorism risk insurance in light of the absence of material terrorist attacks in the United States.

3. Workers’ Compensation Market

Workers’ compensation insurance provides wage replacement and medical benefits to employees who are injured in the scope of employment, as well as death benefits to surviving spouses and dependents. Workers’ compensation is a statutorily-mandated product; under state law, employers must provide it, and insurers may not exclude or limit liability for losses that result from certain perils. Workers’ compensation insurance often receives special attention in discussion of terrorism risk insurance because by state law the coverage cannot exclude losses resulting from acts of terrorism (including NBCR). A workers’ compensation insurer wishing to avoid terrorism exposures in a given jurisdiction would have to cease writing such business altogether. Thus, the availability of commercial workers’ compensation insurance in some localities may wholly depend upon the existence of TRIA and its coverage mandate, federal backstop, and Program Cap.

Aon’s submission in response to the PWG Notice, for example, states: “We are confident that without TRIA (or similar reinsurance capital) the cost of workers’ compensation insurance will be significantly higher, if available at all.” Marsh offered similar observations in its comments: “Without [TRIA], some insurers have indicated to us that they could be forced to withdraw from geographical areas that have the greatest need for terrorism coverage or they may even exit certain lines of business, such as workers’ compensation or commercial property in high profile jurisdictions in the event that they are unable to limit their exposure to terrorism.” In January 2014, Marsh reported that in light of the pending expiration of TRIA, insurers have begun endorsing workers’ compensation renewals to advise policyholders that the premium may change at December 31, 2014, and that some insurers are setting policy expirations at that date.

D. Affordability of Terrorism Risk Insurance

Affordability of insurance for terrorism risk refers to the ability of policyholders to purchase coverage when it is offered. Policyholders able to afford terrorism risk insurance may nonetheless decline coverage for reasons unrelated to the price (e.g., a policyholder has a high risk tolerance or a low perceived risk from acts of terrorism). Nonetheless, the insurance sector generally references the following terrorism risk insurance affordability metrics: (1) terrorism risk premium as a percentage of property insurance premiums; (2) terrorism risk premium as a percentage of total insured value (TIV); and (3) the percentage of policyholders purchasing terrorism risk coverage, known as the take-up rate. Such metrics are applicable to the embedded market.
The Long-Term Availability and Affordability of Insurance for Terrorism Risk

Terrorism risk insurance affordability data have been collected by both Aon and Marsh, and both indicate that terrorism risk insurance premiums, viewed in the aggregate, constitute between 3 and 5 percent of overall property insurance premiums. Pricing appears to have remained consistent, or even to have declined slightly, over the past several years. Recent trends, however, indicate that prices are increasing in anticipation of a potential expiration of TRIA. Finally, both Aon and Marsh report that, in the aggregate, approximately 60 percent of policyholders elect to purchase coverage of terrorism risk, a figure which also has been relatively stable for several years.

1. Pricing Data and Illustrations

Overall, the price for terrorism risk insurance, viewed as a percentage of median property premiums, has declined by half from its 2002 peak. Aon’s data, illustrated in Figure 6, show that the figure has declined from nearly 7 percent to approximately 3 percent, with the lowest point being in early 2012.

*Figure 6: Median Terrorism Premium as a Percentage of Median Property Premium*

![Figure 6: Median Terrorism Premium as a Percentage of Median Property Premium](image)

Pricing of insurance for terrorism risk can vary on a regional basis. For example, an initial (i.e., after the enactment of TRIA) Insurance Services Office (ISO) grouping of U.S. cities into “tiers” according to expected commercial property loss potential from acts of terrorism included the cities of Chicago, New York, San Francisco, and Washington, D.C. in “Tier 1” (i.e., the group with the highest expected loss potential), and the cities of Boston, Houston, Los Angeles, Philadelphia, and Seattle in “Tier 2” (i.e., the group with the second-highest expected loss potential). Insurers may reflect ISO’s assessment of expected loss potential by charging higher premiums for exposures located in high-risk tiers than for exposures in low-risk tiers.

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147 Aon reported to staff that its survey relied on data collected from over 1,200 of its clients that resemble businesses of the size and complexity similar to those in the Fortune 2000. The Aon report reflects the twelve-month period ending on June 30, 2013, and is included with its comment to the PWG Notice. Comment to the PWG Notice from Aon plc (September 2013). The Marsh report was based on data relating to 2,558 of its clients with a median total insured value of $165 million. The Marsh data reflect the 2012 calendar year. *Marsh 2013 Report* at 27.


149 ISO has since revised its terrorism risk insurance rating tiers, generally through refinements within tiers. Other service providers and individual insurers may assess risk tiers differently than ISO, based on proprietary models. *See, e.g.*, Comment to the PWG Notice from Aon plc, 11 (September 2013).
Marsh supplied Figure 7, which shows that terrorism risk insurance pricing generally is lower in the Midwest and higher in the Northeast. For 2012, median premiums ranged from $24 per million of coverage in the Midwest to $31 per million in the South and the Northeast.

**Figure 7: Terrorism Insurance Pricing – Median Rates by Region (Rates per $1 Million of Coverage)**

![Figure 7: Terrorism Insurance Pricing – Median Rates by Region (Rates per $1 Million of Coverage)](source)

Terrorism risk pricing data are also available on an industry basis. Certain industries attract higher prices due to perceived risk exposure to terrorism. Construction, transportation and financial industries face the highest rate per million, with education, healthcare, retail/wholesale, and telecom industries at the lower end of the scale. Considered as a percentage of overall property premiums, however, the construction industry is at the low end, in the 2 to 3 percent range, with transportation, hospitality, and healthcare at the higher end on a percentage basis. Figures 8 and 9, based on data collected by Marsh, show pricing differences by industry, displayed both as cost per million dollars of coverage, and as percentage of premium by industry.

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150 Comment to the PWG Notice from Aon plc, 21 (September 2013).
When benchmarking total terrorism risk insurance premiums divided by TIV, Aon reports (as of June 2013) a general trend toward increasing prices on renewal across most industry subsectors.\textsuperscript{151} Terrorism risk pricing in general moves with the overall rates for property insurance. Natural catastrophe exposure (whether by industry or geography) and associated premium trends will similarly influence terrorism risk insurance premiums in order to maintain the same relative premium allocation. Thus, for example, the record natural catastrophe insured losses experienced since 2011 pushed up terrorism risk insurance pricing to some extent.\textsuperscript{152} Independent of such influences, however, commenters report upward price trends for terrorism risk insurance “as markets have begun to respond to the prospect of TRIA expiring at the end of 2014.”\textsuperscript{153}

Marsh reports that median property terrorism risk insurance premium rates decreased for some industries in 2012, notably financial products and services, food and beverage, and transportation, while rates increased

\begin{itemize}
  \item \textsuperscript{151} Id. at 19.
  \item \textsuperscript{152} Id. at 21.
  \item \textsuperscript{153} Id.
\end{itemize}
most significantly for the media industry, and less so for the chemicals, hospitality, energy, life sciences, and manufacturing industries.154

Figure 10 shows that policyholders in the transportation and health care industries purchase the highest limits – approximately $800 and $600 million, respectively.

**Figure 10: Average Terrorism Limit by Industry Twelve Months Ending 6/30/13**

![Figure 10: Average Terrorism Limit by Industry Twelve Months Ending 6/30/13](image)

Source: Comment to the PWG Notice from Aon plc (September 2013)

Figures 11 and 12, from Marsh, show terrorism risk insurance pricing as a function of TIV – displayed as cost per million, and as a percentage of property premium.

**Figure 11: Terrorism Insurance Pricing – Median Rates by TIV (Rate per Million)**

**Figure 12: Terrorism Insurance Pricing as Percentage of Property Premium by TIV**

![Figure 11: Terrorism Insurance Pricing – Median Rates by TIV (Rate per Million)](image)

![Figure 12: Terrorism Insurance Pricing as Percentage of Property Premium by TIV](image)

Source: Marsh 2013 Report (May 2013)

Figures 11 and 12 show that property terrorism rates tend to be relatively lower as the size of the insured risk increases. Median rates for smaller companies have declined somewhat in the last few years, but remain more than twice that of larger firms. Considered as a percentage of overall property premiums, the rates vary far less appreciably by TIV – ranging from 4 to 5 percent.

2. Take-Up Rate Data and Illustrations

The overall take-up rate for terrorism risk insurance is approximately 60 percent. Figure 13 shows that the aggregate take-up rate for U.S. terrorism risk insurance has not varied appreciably in nearly a decade.

**Figure 13: Property Terrorism Insurance Take-Up Rate by Year**

Take-up rates are not uniform across industries, however. Figure 14 illustrates both take-up rate and annualized premium on an industry-by-industry basis for terrorism risk coverage, based on data collected by Aon. The real estate and entertainment industries have the highest take-up rates of approximately 80 to 90 percent. The take-up rate for the transportation industry is much lower, at roughly 50 percent.

**Figure 14: Property Terrorism Insurance Take-Up and Pricing by Industry**

Marsh also reports terrorism risk insurance take-up rates by industry and region. As shown in Figure 15, of seventeen industries defined by Marsh, the media, education, and financial institution industries had the highest take-up rates in 2012 at 81 percent, 75 percent, and 75 percent, respectively. The industries with the lowest
take-up rates in 2012 were the chemical, energy and mining, and manufacturing sectors at 42 percent, 43 percent, and 48 percent, respectively.

**Figure 15: Terrorism Insurance Take-Up Rate by Industry**

![Terrorism Insurance Take-Up Rate by Industry](image)

Source: Marsh 2013 Report (May 2013)

Figure 16 shows that, considered by region, policyholders in the Northeast had a take-up rate of 77 percent in 2012, while firms in the rest of the country had take-up rates between 53 and 63 percent. These observations are consistent with general risk perceptions, i.e., Tier 1 exposures in the Northeast.
Marsh also analyzed take-up data against TIV. The highest take-up rates (60 to 70 percent) correspond to TIV of $500 million or more, while the lowest take-up rates (60 percent) correspond to TIV of less than $100 million.155

3. Standalone Market

Aon commented in 2013 that “many [insurers] have begun to scale back capacity for terrorism risk.”156 Both Aon and Marsh have stated that pricing volatility in the standalone market had been expected to increase substantially during 2013 in view of uncertainty regarding whether TRIA will expire. According to Aon and Marsh, renewal pricing increases in the standalone market may be an early indicator of substantial decreases in capacity should the embedded category cease to exist, i.e., in the absence of TRIA.157

156 Comment to the PWG Notice from Aon plc, 6 (September 2013).
157 Id. at 6-7; Marsh 2013 Report at 19.
IV. COMMENTS TO THE PWG NOTICE REGARDING MODIFICATIONS TO THE TERRORISM RISK INSURANCE PROGRAM

TRIA is scheduled to expire at the end of 2014, and Congress is considering whether and in what form TRIP may be reauthorized. In anticipation of its possible reauthorization, some commenters to the PWG Notice and other interested parties have offered views on potential modifications to TRIP, including modifications that could reduce federal taxpayer exposure under TRIP, clarify the scope of TRIP regarding losses from NBCR and cyber attacks, and enhance the process for certifying an event as an act of terrorism. Although an analysis of potential modifications to TRIP is outside the scope of PWG’s mandate to report on the long-term availability and affordability of insurance for terrorism risk, this section of the Report identifies issues commenters raised regarding those matters.

A. Reducing Federal Taxpayer Exposure

Prior modifications to TRIP generally reduced federal taxpayer exposure. Some stakeholders argue that if TRIA is not allowed to expire, further reductions to federal taxpayer exposure are appropriate, including modifications to the insurer deductible, the federal share of insured losses above the deductible, or the Program Trigger, or the establishment of ex ante premium payments. However, most commenters favor a long-term reauthorization of TRIP without further material changes to the program.

1. Modifications to the Deductible and/or the Federal Share

The insurer deductible and the federal share of losses that exceed the deductible determine the amount of federal payments potentially made to insurers under TRIP. Supporters of further reductions to federal taxpayer exposure under TRIP express the view that private markets could support greater exposure, in part because of the P/C sector’s record-high aggregate surplus level and ability to insure against large-scale losses from natural catastrophes. Conversely, P/C sector representatives take the view that federal taxpayer exposure already has been substantially reduced, and that insurers are not positioned to bear additional increases to the deductible or co-share levels.

158 See TRIA § 108(c).


160 Twenty-eight of the 29 comments to the PWG Notice support a long-term reauthorization of TRIP.


162 See Comment to the PWG Notice from the American Insurance Association, 6, 14 (September 2013) (arguing that the current balance of public and private exposure under TRIP provides for complete private market coverage of potential losses from conventional terrorist attacks, and that the industry manages a significant level of exposure under the current parameters of TRIP).

163 See, e.g., id. at 2, 14; Comment to the PWG Notice from the Property Casualty Insurers Association of America, 2 (September 2013) (arguing that the current insurer deductible and co-share levels are close to a “tipping point at which further increases will begin to threaten insurer solvency”); Comment to the PWG Notice from the National Association of Mutual Insurance Companies, 4 (September 2013) (warning that further increases to the insurer deductible or co-share amounts would force small- to medium-sized insurers out of the market for terrorism risk); Comment to the PWG Notice from the Coalition to Insure Against Terrorism, 8-9 (citing an Aon 2009 report as evidence that, if TRIA were allowed to expire or were materially altered, property owners would be largely unable to satisfy insurance coverage requirements).
2. Modifications to the Program Trigger

TRIA prohibits federal payments to insurers under TRIP unless aggregate insured losses from a certified act of terrorism exceed the Program Trigger. As originally enacted, TRIA did not include a Program Trigger. TRIEA implemented a Program Trigger of $50 million in 2006, which increased to $100 million in 2007. The Program Trigger remains at $100 million today.

Some commenters argue that because the P/C sector has demonstrated that it can support losses much larger than $100 million, the current Program Trigger should be increased substantially.\(^{164}\) Conversely, at least one commenter argues that evaluating the Program Trigger relative to aggregate industry surplus is misleading, and that increasing the Program Trigger would drive small or mid-size insurers from the market and “expose the federal government to greater costs in the form of post-disaster assistance.”\(^{165}\)

3. Introduction of \textit{Ex Ante} Premiums

Unlike conventional private sector insurance and reinsurance programs, TRIP does not require an up-front premium for the coverage provided.\(^{166}\) Commenters favoring \textit{ex ante} premiums argue that TRIP is subsidizing the insurance industry and that \textit{ex ante} premiums would reduce any subsidy to insurers and provide a pool of funds that could be available for future federal payments under TRIP.\(^ {167}\)

\(^{164}\) See, e.g., Comment to the PWG Notice from the Cato Institute, 16 (September 2013); \textit{The Future of Terrorism Insurance: Fostering Private Market Innovation to Limit Taxpayer Exposure: Hearing before the H. Comm. on Financial Services Subcommittee on Housing and Insurance}, 113\(^{th}\) Cong. (November 13, 2013) (statement of Ernest N. Csiszar, Associate Fellow, R Street Institute, at 9), available at http://financialservices.house.gov/uploadedfiles/hhrg-113-ba04-wstate-ecsiszar-20131113.pdf.

\(^{165}\) Comment to the PWG Notice from the National Association of Mutual Insurance Companies, 5 (September 2013).

\(^{166}\) TRIA § 103(e)(7).

\(^{167}\) See Comment to the PWG Notice from the Cato Institute, 16 (September 2013). Congress considered and rejected insurer premiums for TRIP coverage when it passed TRIA in 2002, in part because of the perception that \textit{ex ante} funding would lead to a permanent program. See, e.g., \textit{Terrorist Risk Insurance: Hearing before the S. Comm. on Banking, Housing, & Urban Affairs}, 107th Cong. 17 (2001) (statement of Sheila Bair, Assistant Secretary for Financial Markets, U.S. Department of the Treasury); id. at 76-77 (prepared statement of Paul H. O’Neill, Secretary, U.S. Department of the Treasury).
B. Clarifying Coverage for NBCR and Cyber Attacks

TRIA requires an insurer to make available coverage for losses from acts of terrorism “that does not differ materially from the terms, amounts, and other coverage limitations applicable to losses arising from events other than acts of terrorism,” but does not explicitly address coverage for losses from NBCR or cyber attacks.

Commercial lines insurance policies generally exclude coverage for losses resulting from NBCR attacks. In 2008, the GAO found that insurers limit NBCR coverage through “long-standing exclusions for nuclear and pollution risks, which already have been approved by state regulators,” and concluded that NBCR coverage was generally unavailable. TRIA is silent as to the presence or absence of an NBCR exclusion in an insurer’s P/C policy.

Insurance for cyber security risk is an emerging line of insurance that is gaining increasing attention. Premium volume in the U.S. cyber insurance market is estimated to be approximately $1 billion – a fraction of the $247 billion of direct premiums written for the total U.S. commercial lines insurance market in 2012. One commenter representing insurers argued that clarity is needed regarding the application of TRIA to losses resulting from cyber terrorist attacks. Another commenter, representing commercial insurance policyholders, argued that coverage of NBCR attacks should be mandatory under TRIA.

C. Enhancing Transparency of the Certification Process

Commenters also advocate enhancing transparency of the certification process under TRIA. Commenters suggest that increased clarity regarding how an event is certified as an act of terrorism could increase certainty for insurance markets and policyholders.

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168 TRIA § 103(c).
170 Importantly, however, states generally prohibit NBCR exclusions in workers’ compensation insurance, and some states require “fire following” coverage consistent with the New York Standard Fire Policy.
172 Comment to the PWG Notice from the Property Casualty Insurers Association of America, 12 (September 2013) (arguing for greater certainty regarding TRIA’s application to losses resulting from cyber terrorist attacks).
173 Comment to the PWG Notice from the Risk Management Society, 5-6 (September 2013) (arguing for the inclusion of NBCR coverage in TRIA).
174 See, e.g., Comment to the PWG Notice from the Property Casualty Insurers Association of America, 7-8 (September 2013) (arguing for increased transparency in the certification process and increased objectivity in the definition of an act of terrorism); Reauthorizing TRIA: The State of the Terrorism Risk Insurance Market, Hearing before the S. Comm. on Banking, Housing, & Urban Affairs, 113th Cong. (September 25, 2013) (statement from Robert P. Hartwig, Ph.D., CPCU, Insurance Information Institute, at 21), available at http://www.banking.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=b9077ddb-2ae2-425a-89dd-793fcb049190&Witness_ID=8f72639-e80f-412f-9672-7af49e64f7 (arguing for a timeframe under which a certification of an event as an act of terrorism must be made).
TRIA does not impose a time frame on the process for determining whether an event should be certified as an act of terrorism, and Treasury declined to introduce such a time frame through regulation in 2003. Some insurers comment that the Secretary should be required to determine whether to certify an event as an act of terrorism within a certain time frame, because certification may affect an insurer’s assessment regarding whether losses caused by the event are covered under the terms of insurance policies. Moreover, state insurance laws or regulations may require an insurer to settle claims within specified time frames. One commenter notes that an insurer could be required to pay certain claims before ascertaining whether such claims reasonably may have been excluded as losses resulting from acts of terrorism.

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175 Treasury previously offered the following view of a pre-determined time frame for certification (68 Fed. Reg. 41,252 (Jul. 11, 2003)):

[T]here is no way to predict future events and ascertain a time frame that would be appropriate for all potential situations. Facts could be immediately available and, after consultation, present a clear basis for a quick determination by the Secretary; conversely, a determination could require more time to gather information and conduct an analysis of the act. Given this inherent uncertainty and the significance of an act of terrorism determination to all aspects of the Program, Treasury does not believe that it would be in the public interest to establish in advance a regulatory time frame that may later prove to be inappropriate or unattainable.

176 See, e.g., Comment to the PWG Notice from the Property Casualty Insurers Association of America, 7-8 (September 2013) (arguing for increased transparency in the certification process and increased objectivity in the definition of an act of terrorism); Comment to the PWG Notice from the National Association of Mutual Insurance Companies, 5 (September 2013); Reauthorizing TRIA: The State of the Terrorism Risk Insurance Market, Hearing before the S. Comm. on Banking, Housing, & Urban Affairs, 113th Cong. (September 25, 2013) (statement from Robert P. Hartwig, Ph. D., CPCU, Insurance Information Institute, at 21), available at http://www.hanking.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=b9077dbb-2ae2-425a-89dd-793fc049190&Witness_ID=8f726a39-e80f-412f-9672-7af49e64fb7.

177 See Comment to the PWG Notice from the Property Casualty Insurers Association of America, 8 (September 2013).

178 Id. Some commercial insurance contracts may use policy forms developed by ISO which provide that a policyholder declining the mandatory offer of coverage for terrorism risk may retain coverage for an act of terrorism that is not certified.

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V. CONCLUSION

The factors examined in this Report regarding the long-term availability and affordability of terrorism risk insurance center around indicators of private market per-risk capacity (i.e., the amount of coverage insurers can make available) and demand for coverage. In summary, private market per-risk capacity for terrorism risk insurance coverage has increased only moderately since 2010. Policyholder take-up rates have remained stable overall, and prices of terrorism risk insurance have been fairly steady, although the market appears to be tightening in anticipation of a potential expiration of TRIA. Policyholders who wish to obtain terrorism risk insurance evidently are able to do so, although some in higher risk industries and some in key urban locations pay relatively higher prices.

Challenges continue to exist regarding the ability of the private market to provide terrorism risk insurance without a federal backstop, particularly with respect to the ability of insurers to model the frequency and severity of losses that could arise from acts of terrorism. Also, reinsurers and the capital markets appear reluctant to provide further support to the terrorism risk insurance market.

Private reinsurance does not appear to be a sufficient substitute for the market certainty provided by TRIA. Despite the 2007 reauthorization of TRIA, private property reinsurance generally continued to exclude acts of terrorism committed by those who are “domestic” agents, as well as all losses caused by NBCR attacks. This suggests that the private terrorism risk insurance market would be different in the absence of TRIA. Comments submitted to the PWG state that insurers would offer significantly less coverage or exit the market altogether without the “make available” requirement and a viable means to cede risk and limit exposure. The existence of only a relatively small standalone terrorism risk insurance market is consistent with this view. Absent TRIA, terrorism risk insurance, particularly for high-value exposures, may become a smaller, specialty market if such coverage remains available at all.

Data and comments provided to the PWG highlight market uncertainty surrounding whether TRIA will be renewed in any form before it expires at the end of 2014. For example, Marsh – whose submission in response to the PWG Notice provided much of the data cited in this Report – published a briefing in January 2014, which states:

Coupled with increasing claims costs, historical unprofitability, and a continued weak interest rate environment, the uncertainty around [TRIAs] future is leading to less availability of workers’ compensation capacity and rate increases for risks located in major urban areas.179

Most commenters generally describe TRIP as an appropriate public-private shared risk model that: (1) ensures that terrorism risk coverage is available to all commercial P/C insurance buyers; (2) makes $100 billion of aggregate private and federal capital available to fund the recovery costs of a potential terrorist attack; (3) provides an overall limit on industry exposure; and (4) includes a recoupment mechanism in the event Treasury makes any payments.

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Relatively few comments in response to the PWG Notice argued against TRIA on grounds of public policy or efficiency. Comments from insurers and policyholders generally shared the view that, in the absence of TRIA, terrorism risk insurance would be less available and/or less affordable due to insurers’ reluctance to maintain exposure to terrorism risk in the face of potentially unlimited losses and unpredictable loss scenarios. Nevertheless, the industry share of exposure to terrorism risks has steadily increased since enactment of TRIA without significant adverse effects on price or availability. Further gradual increases to the industry share appear unlikely to cause significant market disruptions assuming some level of a federal government backstop is maintained.

180 See Comment to the PWG Notice from Marsh, 1 (September 2013) (“Although there has been relative stability in this segment of the market in recent years, this has largely been due to (a) the lack of large subsequent events following September 2001, and (b) the presence of government support through” TRIA); Id. at 10 (“Without some form of backstop to manage the uncertainty of extreme terrorist attacks, our conversation with our (re)insurance suppliers and clients suggest that the current supply of terrorism capacity will contract, the cost ... will increase, and certain geographic zones most in need of the protection may not be able to find adequate supply”).