

# REPORT ON THE OVERALL EFFECTIVENESS OF THE TERRORISM RISK INSURANCE PROGRAM

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FEDERAL INSURANCE OFFICE, U.S. DEPARTMENT OF THE TREASURY

*Completed pursuant to Section 111 of the Terrorism Risk Insurance Program Reauthorization Act of 2015*

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## I. Background

Prior to September 11, 2001, most standard commercial property and casualty insurance policies did not exclude coverage for losses resulting from terrorism. The events of September 11, 2001 (September 11 Attacks) resulted in approximately \$43 billion of property and casualty insurance losses,<sup>1</sup> more than \$28 billion of which was paid by reinsurers to insurers.<sup>2</sup> Thereafter, insurers began to exclude coverage for terrorism risk from commercial property and casualty policies.

Congress enacted the Terrorism Risk Insurance Act of 2002 (TRIA)<sup>3</sup> based, in part, upon its recognition that widespread unavailability of terrorism risk insurance “could seriously hamper ongoing and planned construction, property acquisition, and other business projects, generate a dramatic increase in rents, and otherwise suppress economic activity.”<sup>4</sup> TRIA requires insurers to make coverage available for terrorism risk on certain lines of commercial property and casualty insurance.<sup>5</sup> To assist insurers with the financial exposure resulting from this required offer of coverage, TRIA established the Terrorism Risk Insurance Program (Program), under which certain losses resulting from an “act of terrorism” (as defined by TRIA) are eligible for reimbursement through the Program.<sup>6</sup> The Program is administered in the U.S. Department of the Treasury (Treasury) by the Secretary of the Treasury (Secretary) with the assistance of the Federal Insurance Office (FIO).<sup>7</sup>

TRIA originally authorized the Program for a three-year period ending December 31, 2005. The Program has since been reauthorized three times,<sup>8</sup> most recently in 2015 when President Obama signed into law the Terrorism Risk Insurance Program Reauthorization Act of 2015 (2015 Reauthorization Act), which extended the Program until December 31, 2020.<sup>9</sup> Changes enacted each time that TRIA has been reauthorized have generally had the objective of reducing potential Program exposure to insured losses – by eliminating certain lines of insurance covered, by increasing the insurer deductibles and co-pay shares, or by increasing the aggregate industry

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<sup>1</sup> Insured losses shown in 2013 dollars. See Insurance Information Institute, *Terrorism and Insurance: 13 Years After 9/11 The Threat of Terrorist Attack Remains Real* (September 9, 2014), available at <http://www.iii.org/press-release/terrorism-and-insurance-13-years-after-9-11-the-threat-of-terrorist-attack-remains-real-090914>.

<sup>2</sup> Comments of the Reinsurance Association of America (April 15, 2016) at 1 (noting that “two-thirds of the insured losses for the events of September 11, 2001 were absorbed by the reinsurance industry”), available at <https://www.regulations.gov/#!docketBrowser:rpp=25;po=0;dct=PS:D=TREAS-TRIP-2016-0006;refD=TREAS-TRIP-2016-0006-0001>.

<sup>3</sup> 15 U.S.C. § 6701 note. The provisions of TRIA, as amended, appear in a note of the United States Code and, therefore, references to the provisions of TRIA are identified by the sections of the law (e.g., “TRIA § 102(1) (definition of an ‘act of terrorism’)”).

<sup>4</sup> TRIA § 101(a)(5).

<sup>5</sup> See TRIA § 103(c).

<sup>6</sup> Further details concerning the operation of the Program are provided in Section II of this Report.

<sup>7</sup> 31 U.S.C. § 313(c)(1)(D).

<sup>8</sup> Terrorism Risk Insurance Extension Act of 2005, Pub. L. 109-144, 119 Stat. 2660; Terrorism Risk Insurance Program Reauthorization Act of 2007, Pub. L. 110-160, 121 Stat. 1839; Terrorism Risk Insurance Program Reauthorization Act of 2015, Pub. L. 114-1, 129 Stat. 3.

<sup>9</sup> Treasury has published a notice of proposed rulemaking to implement the 2015 Reauthorization Act changes to TRIA, and for other purposes. See 81 Fed. Reg. 18950 (Apr. 1, 2016).

retention amount. To date, an event has never been certified as an “act of terrorism” under TRIA and, therefore, no payments have been made to participating insurers.

The 2015 Reauthorization Act provides that beginning in calendar year 2016 the Secretary shall require participating insurers to provide information and data for the Secretary to analyze the overall effectiveness of the Program.<sup>10</sup> The information to be provided to the Secretary by participating insurers includes information regarding:

- (1) lines of insurance with exposure to terrorism losses;
- (2) premiums earned on coverage offered for terrorism losses;
- (3) geographical location of exposures;
- (4) pricing of terrorism coverage offered;
- (5) the take-up rate for terrorism coverage;
- (6) the amount of private reinsurance for acts of terrorism purchased; and
- (7) such other matters as the Secretary considers appropriate.<sup>11</sup>

Based upon this information, the Secretary is required to submit a report no later than June 30, 2016, and every other June 30 thereafter, to the Committee on Financial Services of the House of Representatives, and the Committee on Banking, Housing, and Urban Affairs of the Senate, that includes:

- (1) an analysis of the overall effectiveness of the Program;
- (2) an evaluation of any changes or trends in the data collected by the Secretary, as described above;
- (3) an evaluation of whether any aspects of the Program have the effect of discouraging or impeding insurers from providing commercial property casualty insurance coverage or coverage for acts of terrorism;
- (4) an evaluation of the impact of the Program on workers’ compensation insurers; and
- (5) an estimate of the total amount of premiums earned on terrorism risk insurance since January 1, 2003.<sup>12</sup>

This report (Report) addresses the statutory considerations and is submitted pursuant to the 2015 Reauthorization Act. For reasons discussed below relating to the collection of relevant data, the analyses and conclusions of this Report are preliminary.

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<sup>10</sup> TRIA § 104(h)(1).

<sup>11</sup> TRIA § 104(h)(1)(A)-(G).

<sup>12</sup> TRIA § 104(h)(2)(A)-(E).

## II. The Terrorism Risk Insurance Program

In general terms, the Program requires that each entity meeting the definition of an insurer<sup>13</sup> make available coverage for insured losses resulting from certified acts of terrorism (as defined below) “that does not differ materially from the terms, amounts, and other coverage limitations applicable to losses arising from events other than acts of terrorism.” This requirement applies to certain statutorily defined lines of property and casualty insurance (i.e., the “TRIP-eligible” lines of insurance).<sup>14</sup> Reinsurance is specifically excepted from the definition of TRIP-eligible lines of insurance.<sup>15</sup> Although TRIA requires insurers to make available insurance for terrorism risk on the same terms as other insurance, it does not mandate any particular price for such coverage, nor does it require the policyholder to purchase insurance for terrorism risk.

Only losses from certified acts of terrorism are eligible for Federal payments to insurers under the Program. A certified “act of terrorism” is an act certified by the Secretary, in consultation with the Attorney General of the United States and the Secretary of Homeland Security:

- 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;<sup>16</sup> and

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<sup>13</sup> 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 insurance entity 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).

<sup>14</sup> The TRIP-eligible lines of insurance are those lines identified for state regulatory purposes as follows: Fire, Allied Lines, Commercial Multiple Peril (non-liability), Commercial Multiple Peril (liability), Ocean Marine, Inland Marine, Workers’ Compensation, Other Liability (but not including Professional Liability, which is otherwise within this line for state reporting purposes), Products Liability, Aircraft, and Boiler and Machinery. TRIA § 102(11)(A); *see also* 31 CFR 50.5(u) (June 2016).

<sup>15</sup> TRIA § 102(11)(B)(vii). Reinsurance is insurance for insurance companies; it is a contract of indemnity between commercial parties – an insurer (i.e., the “cedent” or “ceding insurer”) and one or more “assuming insurers” (i.e., reinsurers) – by which, in exchange for a premium, a specified portion of the risks under one or more insurance policies written by the cedent are transferred (“ceded”) to the reinsurers. Reinsurance serves an important function as protection for cedents against the accumulation of losses arising from catastrophic events. Similar to reinsurance, retrocessional insurance (or “retrocession”) is a contract of indemnity whereby a reinsurer (i.e., the “retrocedent”) transfers the liabilities and benefits assumed in a reinsurance contract to another reinsurer (i.e., the “retrocessionaire”). *See generally* Federal Insurance Office, U.S. Department of the Treasury, *The Breadth And Scope Of The Global Reinsurance Market And The Critical Role Such Market Plays in Supporting Insurance In the United States* (December 2014), available at <https://www.treasury.gov/initiatives/fio/reports-and-notice/ Documents/FIO%20-Reinsurance%20Report.pdf>. Issues concerning private reinsurance and the Program are discussed further below in Section V.F.

<sup>16</sup> TRIA also provides that an act may occur outside the United States in the case of certain air carriers or vessels, or on the premises of an U.S. mission. TRIA § 102(1)(A)(iii)(I)-(II).

- 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.<sup>17</sup>

The Secretary shall not certify an act that was either committed as part of the course of a war declared by Congress,<sup>18</sup> or that does not result in property and casualty insurance losses exceeding \$5 million.<sup>19</sup>

In the event of certification of an act of terrorism by the Secretary, determination of whether and in what amounts insurers are eligible for payments under the Program involves the application of multiple factors, including the Program Trigger, individual insurer deductibles, the Federal share of compensation, and the Program Cap. The Program Trigger is the amount of aggregate industry insured losses that must be exceeded before any federal payments are made. The Program Trigger is \$120 million in calendar year 2016; it will increase by \$20 million per year thereafter until it reaches \$200 million in 2020.<sup>20</sup> If aggregate industry insured losses exceed the Program Trigger, an insurer must pay its individual insurer deductible – i.e., an amount of losses that equal 20 percent of its direct earned premium in TRIP-eligible lines for the prior calendar year – before becoming eligible for Federal payments.<sup>21</sup> The Federal share in calendar year 2016 is set at 84 percent of insured losses in excess of a particular insurer’s deductible, with the insurer remaining responsible for a continuing co-participation share of 16 percent. The Federal share will decrease by one percentage point a year through 2020, at which time the Federal share will be 80 percent and the insurer co-participation share will be 20 percent.<sup>22</sup>

For certified acts of terrorism, TRIA also limits the ultimate exposure of insurers under TRIP-eligible lines of insurance and of the Federal government for payments to insurers under the Program. 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 any calendar year.<sup>23</sup> Moreover, an insurer that meets its insurer deductible under the Program is also not liable for any portion of losses that exceeds the Program Cap.<sup>24</sup>

Finally, in the event that Federal payments are made to insurers under the Program, TRIA includes a mechanism for the Secretary to recoup “terrorism loss risk-spreading premiums” from insurers.<sup>25</sup> When imposed by the Secretary, insurers are required to collect such premiums from policyholders as a surcharge on insurance policies for TRIP-eligible lines of insurance after the

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<sup>17</sup> TRIA § 102(1)(A).

<sup>18</sup> TRIA § 102(1)(B)(i). This limitation does not apply with respect to coverage for workers’ compensation insurance.

<sup>19</sup> TRIA § 102(1)(B)(ii).

<sup>20</sup> TRIA § 103(e)(1)(B).

<sup>21</sup> TRIA §§ 102(7); 103(e)(1)(A).

<sup>22</sup> TRIA § 103(e)(1)(A).

<sup>23</sup> TRIA § 103(e)(2)(A).

<sup>24</sup> *Id.* 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 the Program exceed the Program Cap. TRIA § 103(e)(2)-(3).

<sup>25</sup> TRIA § 103(e)(7).

calendar year in which Federal payments are made, and to remit them to the Secretary.<sup>26</sup> The requirement to collect, or recoup, terrorism loss risk-spreading premiums and remit such amounts collected to Treasury is not limited to insurers that received Federal payments under the Program, but rather applies to all insurers of TRIP-eligible lines.<sup>27</sup> The amount of recoupment is determined according to provisions of TRIA that account for the Federal payments made under the Program and the total insured losses from certified acts of terrorism during a particular calendar year.

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<sup>26</sup> TRIA § 103(e)(8)(A), (B).

<sup>27</sup> *Id.*

### III. Data Collection Process

The 2015 Reauthorization Act requires the Secretary to collect data related to the Program from insurers. Treasury engaged extensively with stakeholders to identify the specific data items needed to satisfy the statutory requirements, and also to establish a reporting mechanism that would allow insurers to submit data in a manner consistent with industry practices.<sup>28</sup>

In 2015, Treasury held three stakeholder meetings with more than 50 participants to address various issues related to data collection under the 2015 Reauthorization Act. In addition, Treasury engaged with individual stakeholders on approximately 150 separate occasions, including engaging on more than 35 occasions with state insurance regulators. Stakeholders with whom Treasury engaged included: state insurance regulators, insurance industry trade associations, consumers, insurance data aggregators, insurers (including admitted insurers as well as non-admitted insurers, such as domestic and alien insurers writing excess and surplus lines),<sup>29</sup> reinsurers, insurance and reinsurance producers, state-sponsored workers' compensation insurance providers, and captive insurers.

#### A. Required Data

Following the stakeholder engagement described above, on March 4, 2016, Treasury released a data collection template to be used by insurers for Treasury's inaugural 2016 data collection. To meet the statutory conditions for the Report, the data collection template sought data in four general areas relating to calendar year 2015:

- (1) *Pricing*: Data sought included the premium charges for terrorism risk insurance as disclosed to consumers, how the premium associated with terrorism risk compares to total premium for TRIP-eligible lines of insurance, specialized pricing information under package/multiline policies, standalone policies, and policyholder industry classifications.
- (2) *Take-up rate*: Responsive data included the number of policies, the premiums, and the values of risk exposures in instances when offered terrorism risk coverage was purchased versus instances when it was not.

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<sup>28</sup> In addition to the collection of data from participating insurers, Treasury also published a notice seeking comments from interested parties concerning the matters to be addressed in this Report. *See* 81 Fed. Reg. 16281 (March 25, 2016). In response, Treasury received 8 comments from interested parties, consisting of the American Insurance Association (AIA), the Property Casualty Insurers Association of America (PCIAA), the National Association of Mutual Insurance Companies (NAMIC), Lloyd's of London (Lloyd's), The Council of Insurance Agents & Brokers (CIAB), the Coalition to Insure Against Terrorism (CIAT), the Reinsurance Association of America (RAA), and the Association of Bermuda Insurers and Reinsurers (ABIR). The comments are *available at* <https://www.regulations.gov/#!docketBrowser:rpp=25:po=0:dct=PS:D=TREAS-TRIP-2016-0006:refD=TREAS-TRIP-2016-0006-0001>. Information from these comments is incorporated into the Report where appropriate.

<sup>29</sup> Admitted insurers are licensed by state jurisdictions to conduct business within the state, and are subject to state policy form and rate requirements. Non-admitted insurers, which may include U.S. insurers and non-U.S. insurers that have qualified to write business in the United States, may provide coverage for excess and surplus lines risks that the admitted market may not cover (*e.g.*, risks that occur infrequently, and risks that are specialized or unusual), subject to the laws and regulations of the various states. As a result, insurers writing excess and surplus lines typically have greater flexibility in terms of policy forms and pricing than is the case with admitted insurers.

- (3) *Exposure*: Data sought included total insured values, limits of liability, and payroll figures subject to coverage under the Program on national and state-by-state bases, and in certain defined metropolitan areas that may be at higher risk for terrorist activity.<sup>30</sup>
- (4) *Reinsurance*: Responsive data included the amount of private reinsurance covering acts of terrorism purchased by reporting insurers, as well as limitations on such reinsurance that might exist.

## **B. Data Collection Method**

In order to provide a transition period for responding insurers, Treasury determined that the 2016 data collection would be voluntary.<sup>31</sup> Treasury is evaluating the results of this voluntary collection to identify areas where adjustments may be necessary or appropriate to improve the efficiency of future data collections.

In conformity with the law, Treasury arranged for the collection of data in 2016 through an insurance statistical aggregator, obtaining information directly from participating insurers but in an aggregated format that does not identify insurer-specific information. The use of such an aggregator assists in maintaining confidentiality with respect to non-public information submitted by participating insurers.

Pursuant to the 2015 Reauthorization Act, and prior to collecting data from participating insurers, Treasury coordinated with state insurance regulators and other government agencies, and reviewed other resources, to determine whether the needed information was available and could be obtained in a timely manner from other sources.<sup>32</sup> Treasury determined that such responsive data and information could not be obtained in a timely manner from other sources.

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<sup>30</sup> Insurance financial rating agencies typically consider such information when evaluating the exposure of the companies under review to terrorism-related loss. *See, e.g.*, A.M. Best Supplemental Rating Questionnaire for 2014 Business (Terrorism Section), available at [http://www.ambest.com/ratings/PC\\_SRQ.PDF](http://www.ambest.com/ratings/PC_SRQ.PDF).

<sup>31</sup> *See* 81 Fed. Reg. 11649 (Mar. 4, 2016).

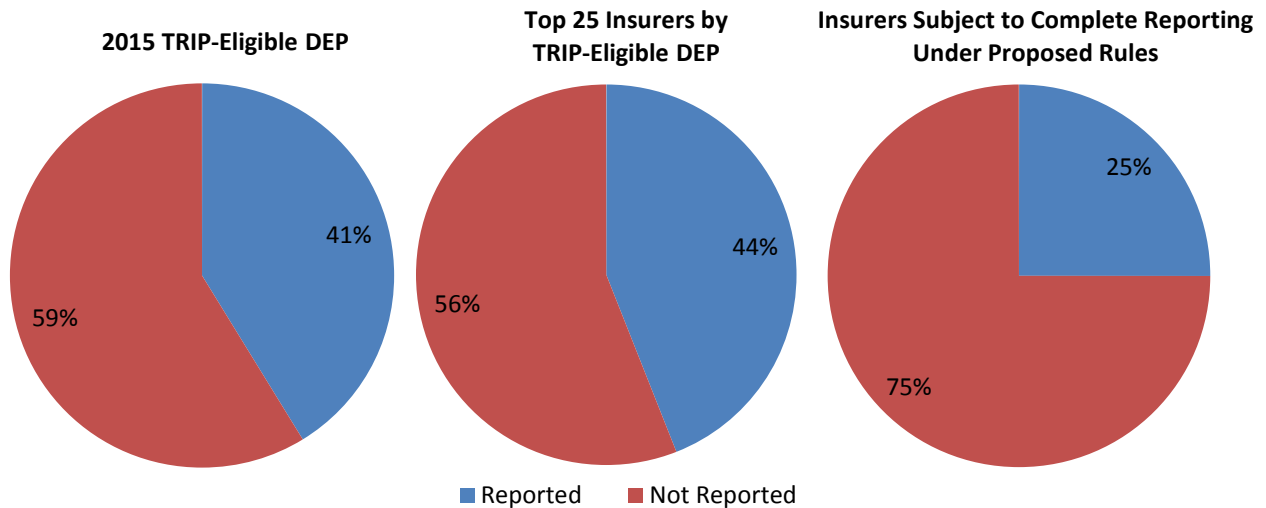
<sup>32</sup> TRIA § 104(h)(4).



#### IV. Data Collection Response

In 2015, the direct earned premium (DEP) for insurers in the U.S. property and casualty insurance sector was approximately \$286 billion on commercial insurance policies (including workers' compensation). Of this, TRIP-eligible lines generated roughly \$206 billion, or about 72 percent of all commercial DEP.<sup>33</sup> That coverage was written by 796 insurers, many of which include multiple subsidiaries.<sup>34</sup>

**Figure 1: Data Collection Response Percentages**



Fifty-two insurer groups provided some or all of the requested information. These insurers represent approximately \$85 billion in TRIP-eligible line DEP identified above, or about 41 percent of the 2015 total DEP for TRIP-eligible lines. This group of insurers includes 11 of the 25 largest insurance groups (by total premiums in TRIP-eligible lines), and approximately 25 percent of insurers whose size would require submission of complete data in future years under Treasury's proposed rules released on April 1, 2016.<sup>35</sup>

Notably, while Treasury was able to obtain some data from insurers representing a significant portion of the market, some of the reporting insurers were unable to complete all data templates. Treasury will continue to work with stakeholders to adopt an efficient data collection process that satisfies the statutory objectives.

<sup>33</sup> Source: SNL Financial, as of April 20, 2016. This figure includes Professional Liability premium, which is not TRIP-eligible premium.

<sup>34</sup> SNL Financial. These figures do not include coverage provided by alien surplus lines insurers and captive insurers, as discussed further below.

<sup>35</sup> See 81 Fed. Reg. 18950 (Apr. 1, 2016).

In addition, Treasury sought to collect data from alien surplus lines insurers and domestic captive insurers<sup>36</sup> because these types of insurers also participate in the Program.<sup>37</sup> Treasury received only limited data from these entities during the 2016 data collection.<sup>38</sup> Alien surplus lines insurers and domestic captive insurers are eligible for reimbursement under the Program and often provide coverage for risks that are more difficult to insure. Treasury will continue to evaluate the manner in which these insurers participate in the Program through the collection of responsive data and otherwise. While this initial data collection exercise was voluntary, failure to provide data in future years may result in financial penalties under the Program.

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<sup>36</sup> Alien surplus lines insurers are non-U.S. insurers that have qualified with state insurance regulatory authorities to provide insurance on a surplus lines basis, as discussed in note 29 above. Captive insurers are discussed further below, in Section V.G.

<sup>37</sup> TRIA § 102(6)(A)(i)-(ii).

<sup>38</sup> During the 2016 data collection exercise, Treasury received data through its collection portal from only three alien surplus lines insurers (although it did receive some additional information directly from alien surplus lines insurers), 52 captive insurers, and eight risk retention groups. A risk retention group (RRG) is an insurance company formed and owned by its members to insure the liability risks of those members. In most states, RRGs are regulated as captive insurers. The information that was obtained from the reporting captive insurers and RRGs is addressed further below.

## V. Analysis of the Overall Effectiveness of the Program

The Program was created in response to insurers managing exposure following the September 11 Attacks by excluding terrorism risk from policies otherwise covering property and casualty risks. Recognizing that the unavailability of affordable terrorism risk insurance for commercial properties had broad implications for economic growth and development,<sup>39</sup> Congress sought to: (1) “ensure the continued widespread availability and affordability of property and casualty insurance for terrorism risk,” and (2) permit private markets to stabilize such that terrorism insurance could be provided on an ongoing basis.<sup>40</sup>

Treasury analyzes the availability and affordability of terrorism risk insurance as significant benchmarks that should be evaluated in any analysis of the effectiveness of the Program. Treasury also considers the “take-up rate,” which measures the consumption of terrorism risk coverage by commercial policyholders as a whole.

To analyze the effectiveness of the Program, Treasury has also considered (based upon responses of participating insurers) the results of a modeled loss scenario to assess the likely impact upon insurers and the Program in the event of a certified act of terrorism. Finally, to assess whether private markets have stabilized in the wake of the September 11 Attacks through the operation of the Program, Treasury also considers available information concerning the amount and type of private terrorism risk reinsurance that insurers report having purchased in the marketplace.

### A. Availability of Terrorism Risk Insurance

TRIA requires property and casualty insurers that write TRIP-eligible lines of insurance “make available” coverage in all such lines for terrorism risk that does not differ materially from the terms, amounts, and other coverage limitations provided for other losses covered by those lines of insurance. Terrorism risk coverage provided on this basis is said to be “embedded” in the policies issued by participating insurers that cover these other risks as well. Coverage may also be provided on a “standalone” basis, where the policy provides coverage only for terrorism risk. Such standalone policies are typically issued to policyholders whose properties or operations present unique and often heightened exposure to terrorism risk.

While TRIA requires insurers to “make available” terrorism risk coverage, insurers remain able to limit exposure to terrorism risk in various ways. For example, insurers limit exposure to terrorism risk by pricing, by declining to write particular risks, and by excluding coverage for certain forms of terrorism loss where permitted by state law – such as for nuclear, biological, chemical, or radiological (NBCR) attacks. Insurers can even decline to write a particular line of insurance entirely if that line presents too great a risk of loss on account of terrorism. Treasury’s 2016 data collection did not seek information directly relating to compliance with the “make available” requirement under TRIA because all evidence indicates that terrorism risk insurance is available to commercial policyholders.

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<sup>39</sup> TRIA § 101(b)(1).

<sup>40</sup> TRIA § 101(b)(2).

Package or multiline policies are insurance products that encompass multiple lines of insurance and are more typically purchased by smaller or medium-sized business entities.<sup>41</sup> The reported data reflects that package policies constituted (in terms of proportion of premium) approximately 14 percent of all reported policy premium. Measured by policy premium, 91.5 percent of all package policies nationwide include terrorism risk insurance, with uniformly high percentages observed in all areas of the United States. By contrast, the figure indicated for all other TRIP-eligible lines policies issued by the reporting insurers was 58.5 percent. The fact that terrorism risk insurance is obtained by such a large percentage of policyholders suggests that participating insurers are regularly complying with the “make available” requirement.

Standalone policies solely address terrorism-related risk, and do not respond to loss arising from other perils. Standalone policies may be written to provide coverage for insured losses and, therefore, implicate the backstop provisions of the Program. Such policies are thus subject to Program requirements, such as the Program disclosure requirements, the limitation to losses arising from certified “acts of terrorism,” and the cap on annual Program liability. Standalone policies are typically written by domestic and alien surplus lines insurers, which have greater flexibility than carriers in the admitted market to develop the required policy forms and to price the coverage accordingly.

Insurers reported limited information concerning standalone terrorism coverage. Reporting insurers identified total premiums of only \$29 million associated with such policies covering Program exposures – or only about 2.5 percent of the total terrorism risk premium collected by those insurers. The reported data likely understates the total portion of the market addressed by standalone policies, given the lack of information supplied by many surplus lines insurers that issue such policies. Accordingly, it remains unclear whether policyholders that do not or that are unable to obtain coverage through the embedded market can obtain desired coverage through the standalone market. Treasury will continue to evaluate the characteristics of the standalone market for terrorism risk insurance and its place within the Program, and will conduct additional analysis when it receives more comprehensive data that will provide a clearer picture of these issues.

## **B. Affordability of Terrorism Risk Insurance**

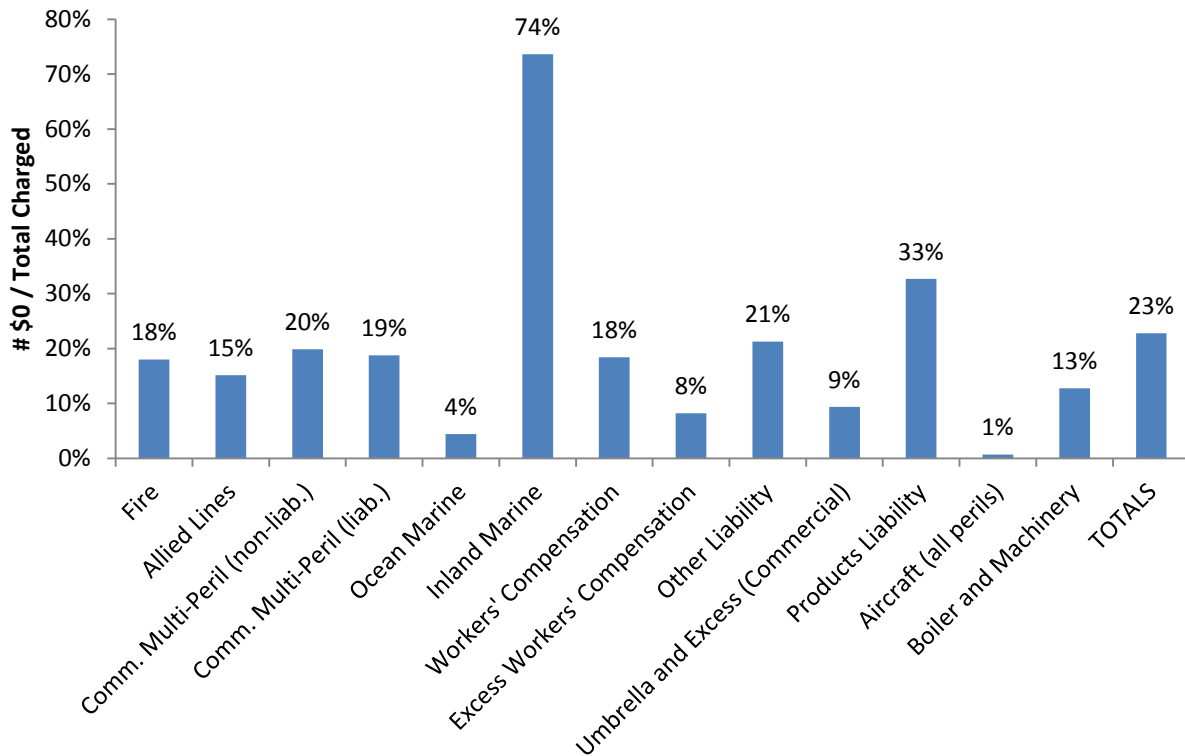
Although insurers must “make available” terrorism coverage in the TRIP-eligible lines of insurance, an insurer may charge premiums it deems appropriate, subject to state law limitations. TRIA requires participating insurers, as a pre-condition of Federal payment, to have provided “clear and conspicuous disclosure to the policyholder of the premium charged for insured losses covered by the Program.”<sup>42</sup> Such disclosures improve the ability of potential policyholders to make informed purchase decisions. Although a premium is charged for terrorism risk in the majority of cases where the coverage is obtained, approximately 23 percent of insurers offer terrorism risk insurance at a disclosed \$0 premium charge.

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<sup>41</sup> See generally Insurance Information Institute, Understanding Business Owners Policies (BOPs) (noting that business owners policies that package together multiple lines typically needed by small businesses are generally more cost effective for such businesses than purchasing separate policies for each line of insurance), [available at http://www.iii.org/article/understanding-business-owners-policies-bops](http://www.iii.org/article/understanding-business-owners-policies-bops).

<sup>42</sup> TRIA §103(b)(2); see also 31 CFR 50.10 (June 2016).

**Figure 2: Coverage Subject to a Disclosed \$0 Charge for Terrorism Risk**



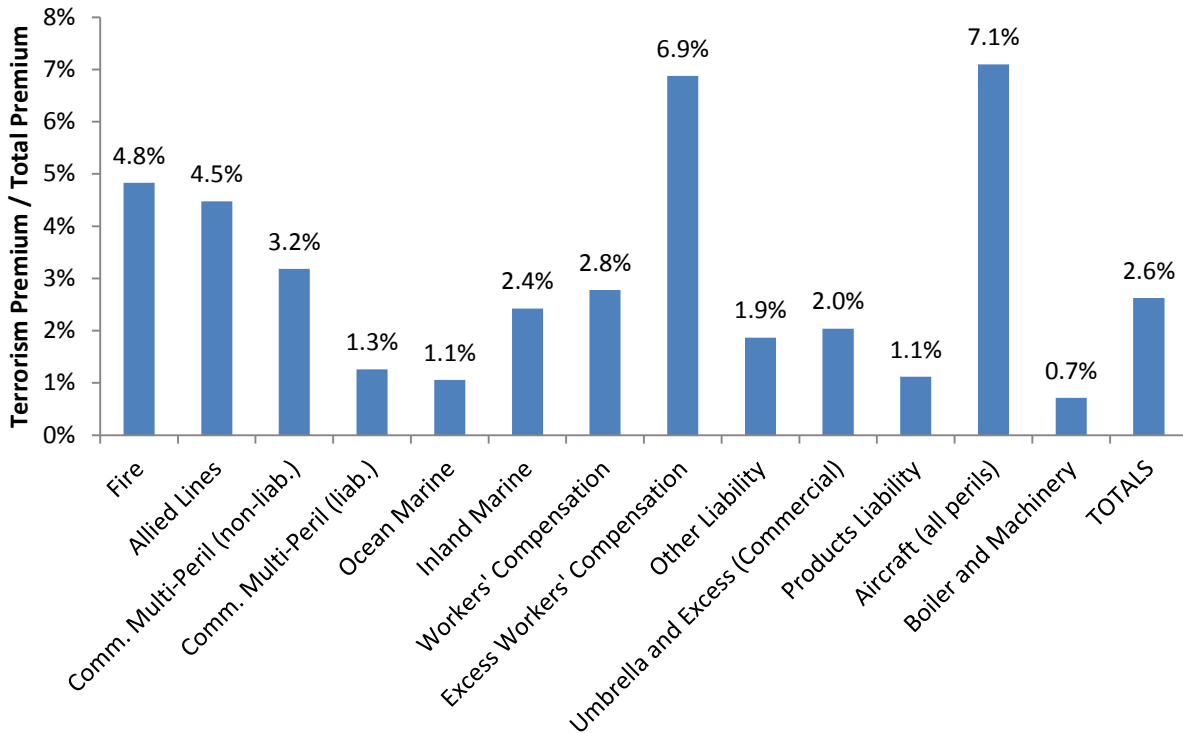
An insurer might offer terrorism risk coverage for a disclosed \$0 premium charge to ease administrative burdens or for other idiosyncratic reasons, and/or due to the lack of any cognizable terrorism risk presented in certain regions or under certain policies.<sup>43</sup> The frequency of insurers providing terrorism risk coverage at a disclosed \$0 cost varies by line of insurance. For example, the reported data reflects that 74 percent of Inland Marine insurance policies (covering risks associated with the transportation of property) offer terrorism risk coverage for a disclosed price of \$0, while only 1 percent of aircraft policies do the same.

If an insurer does charge for terrorism risk insurance, on average the coverage associated with terrorism risk accounts for approximately 2.6 percent of the total policy premium. This percentage varies based on the TRIP-eligible lines of coverage,<sup>44</sup> with the highest rates charged for excess workers' compensation insurance and aircraft insurance.

<sup>43</sup> By comparison, at the beginning of the Program there was a period of time that \$0 premium charges were more prevalent, apparently as a carryover from experience prior to the September 11 Attacks. See U.S. Department of the Treasury, Assessment: The Terrorism Risk Insurance Act of 2002 (June 30, 2005) (2005 Treasury Report), at 4, available at <https://www.treasury.gov/resource-center/fin-mkts/Pages/resources.aspx>.

<sup>44</sup> Treasury collected information separately as to Excess Workers' Compensation (a component of the Workers' Compensation TRIP-eligible line) and Umbrella and Excess (a component of the Other Liability TRIP-eligible line).

**Figure 3: Cost of Terrorism Risk Coverage as a Percentage of Total Policy Premium**



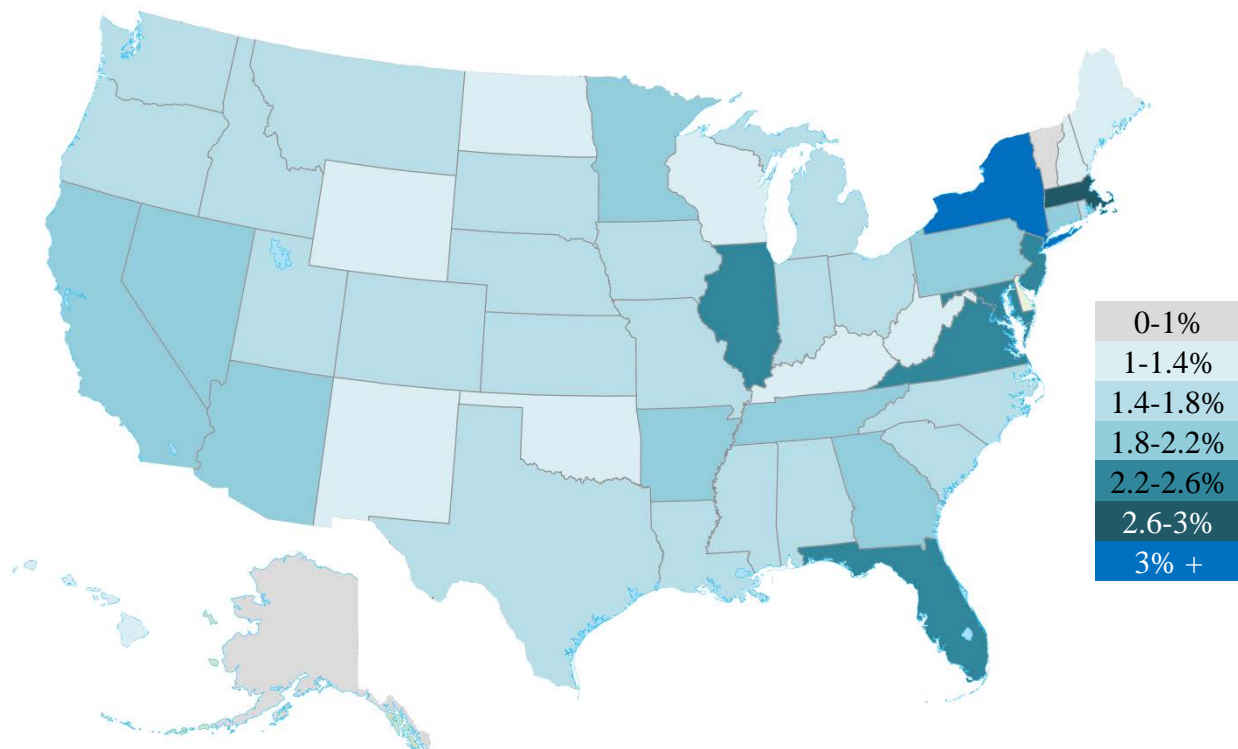
Once terrorism risk premiums are compared against total premium charges when the coverage is obtained, a somewhat lower percentage charge – which accounts for those situations where coverage is provided for a \$0 disclosed premium – is indicated. For the United States as a whole, the reported data indicates that, on average, the additional rate charged is 2 percent, as distinguished from the 2.6 percent indicated for only those situations where a charge is made. The reported data also indicated that this figure varies by state, as reflected in Figure 4.

These percentages of the total premium associated with terrorism risk across the TRIP-eligible lines of coverage are generally consistent with prior evaluations by Treasury.<sup>45</sup> Furthermore, previously reviewed data has shown that the price of terrorism risk coverage has declined over time.<sup>46</sup>

<sup>45</sup> See President’s Working Group on Financial Markets (PWG), *The Long-Term Availability and Affordability of Insurance for Terrorism Risk* (April 2014) (2014 PWG Report), at 25-26, available at <https://www.treasury.gov/resource-center/fin-mkts/Pages/resources.aspx>.

<sup>46</sup> See Treasury 2005 Report, at 4, 64; PWG, *Terrorism Risk Insurance* (September 2006) (2006 PWG Report), at 36-38, available at <https://www.treasury.gov/resource-center/fin-mkts/Pages/resources.aspx>; 2014 PWG Report, at 26-27.

**Figure 4: Variation in Consolidated Terrorism Risk Premium Nationally**



### C. Take-up of Terrorism Risk Insurance

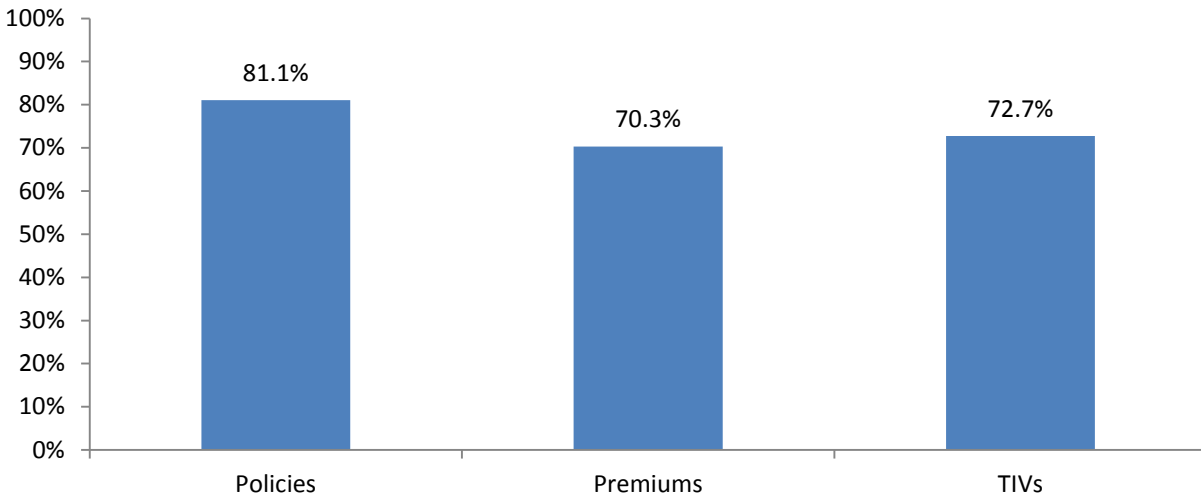
TRIA requires an offer but not the purchase of terrorism risk insurance.<sup>47</sup> Thus, the extent to which terrorism risk insurance is purchased by policyholders (the “take-up rate”) is an important metric to examine because the take-up rate may approximate the distribution of insured payments in the event of a terrorist attack, and a high take-up rate increases the likelihood that losses arising from a terrorist attack will be covered by private capital from commercial insurers. Prior analyses by Treasury found that the take-up rate in 2003 (the first full year of the Program) was approximately 27 percent (as measured by number of policyholders) and, thereafter, increased to approximately 60 percent as of 2006.<sup>48</sup>

Take-up can be measured in a variety of ways, such as by number of policies issued, premiums charged, and total insured values (TIVs). A take-up rate based upon the number of policies, while useful for measuring the number of insureds, is a figure whose significance may be skewed by less costly risks with lower insured values. By contrast, take-up rates measured by premiums or TIVs may more closely estimate the amount of insured business activity.

<sup>47</sup> Workers’ compensation is the exception, because of state law requirements. Thus, the take-up figures discussed in this section do not consider workers’ compensation, which is subject as a matter of state law to a 100% take-up rate. *See also* below at Section VI (discussing impact of the Program on workers’ compensation insurers).

<sup>48</sup> 2005 Treasury Report, at 3, 84; 2006 PWG Report, at 42-44; PWG, Market Conditions for Terrorism Risk Insurance (2010) (2010 PWG Report), at 23, available at <https://www.treasury.gov/resource-center/fin-mkts/Pages/resources.aspx>; 2014 PWG Report, at 30.

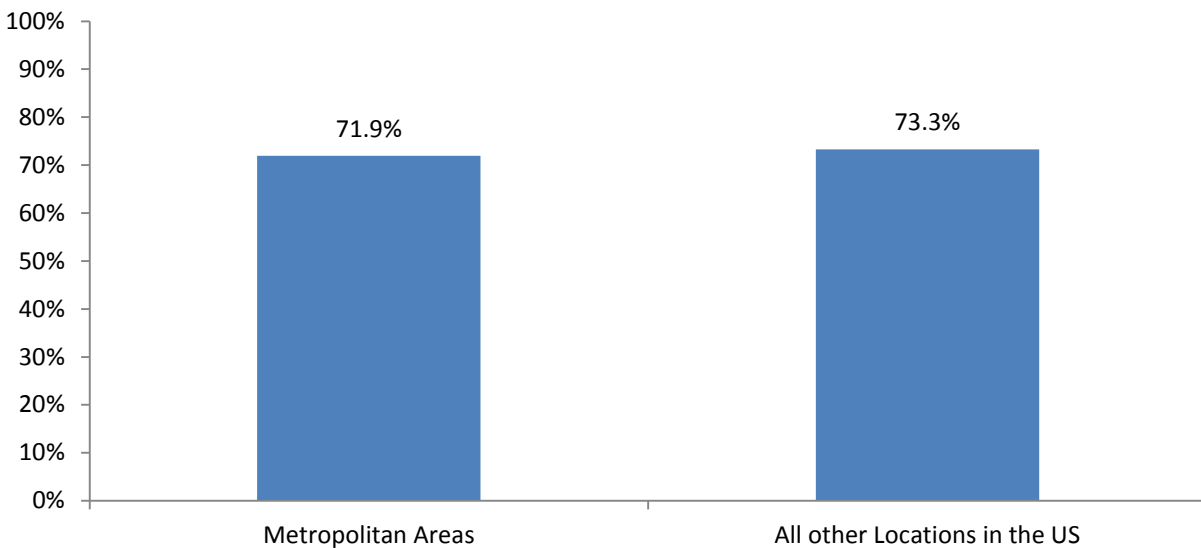
**Figure 5: Take-up Rate of Terrorism Risk Insurance**



#### **D. Geographic Concentration of Exposure**

The take-up rate of terrorism risk coverage – as measured by the total insured values covered or not covered by terrorism risk insurance – can also vary between large metropolitan areas<sup>49</sup> as compared to the regions of the United States outside of these areas. The take-up rate reflected by the reported data is actually slightly higher *outside* of the identified metropolitan areas.

**Figure 6: Total Insured Value Subject to Terrorism Risk Coverage – Metropolitan vs. Other Locations**



<sup>49</sup> As based upon the U.S. Department of Homeland Security’s listing of areas eligible for anti-terrorism funding under the Urban Areas Security Initiative (focused upon high-threat, high density urban areas in the United States), available at [http://www.fema.gov/media-library-data/1429291822887-7f203c9296fde6160b727475532c7796/FY2015HSGP\\_NOFO\\_v3.pdf](http://www.fema.gov/media-library-data/1429291822887-7f203c9296fde6160b727475532c7796/FY2015HSGP_NOFO_v3.pdf).



The modestly higher take-up rate outside large metropolitan areas may reflect the fact that where terrorism risk is not highly material from an underwriting standpoint, it is often provided on very favorable terms (including in many cases for a \$0 disclosed charge) embedded in TRIP-eligible lines policies, thereby resulting in a higher take-up rate. By contrast, in metropolitan areas where the cost of terrorism coverage may be higher, and perhaps provided in some cases only through standalone policies, policyholders may be more inclined to decline the coverage due to financial considerations. Geographic concentrations of exposure also vary by state, as well as by individual metropolitan jurisdictions.

### **E. Impact on Participating Insurers and the Program**

In an effort to analyze the direct financial impact of the Program, Treasury sought certain information designed to illustrate the manner in which a hypothetical terrorist attack would expose participating insurers to losses and give rise to potential claims under the Program. Therefore, in one part of the 2016 data collection exercise, participating insurers were asked to assess the financial impact of a hypothetical terrorist attack of a five-ton truck bomb in a major urban area. Based upon specific identified parameters,<sup>50</sup> each reporting insurer was asked to report in connection with such an event the amount of likely exposure that would be within the insurer's TRIA deductible, the amount expected to be covered by private reinsurance (if any), the amount likely to be claimed for reimbursement under the Program, and the amount of the participating insurer's continuing co-pay obligation above its deductible.

The total aggregate insured loss identified by the reporting insurers<sup>51</sup> for this scenario is \$14.201 billion, as represented by the first column in Figure 7 below. The remaining columns indicate the distribution of the loss to: (1) the deductibles of participating insurers (\$7.752 billion); (2) the private reinsurers of participating insurers (\$3.255 billion); (3) the Program (\$2.709 billion); and (4) the co-pay obligations, above the deductibles, of participating insurers (\$486 million). Given that the reporting insurers do not represent the entire market, a total loss of more than \$14.2 billion and a claim against the Program of more than \$2.7 billion may be indicated. Even with an event of this size, however, and the possibility of some additional exposure arising from non-reporting insurers, data received indicates that although payments under the Program would clearly be required, the likely exposure under the Program would fall within amounts that Treasury would be required to recover through the Program's recoupment procedures.<sup>52</sup>

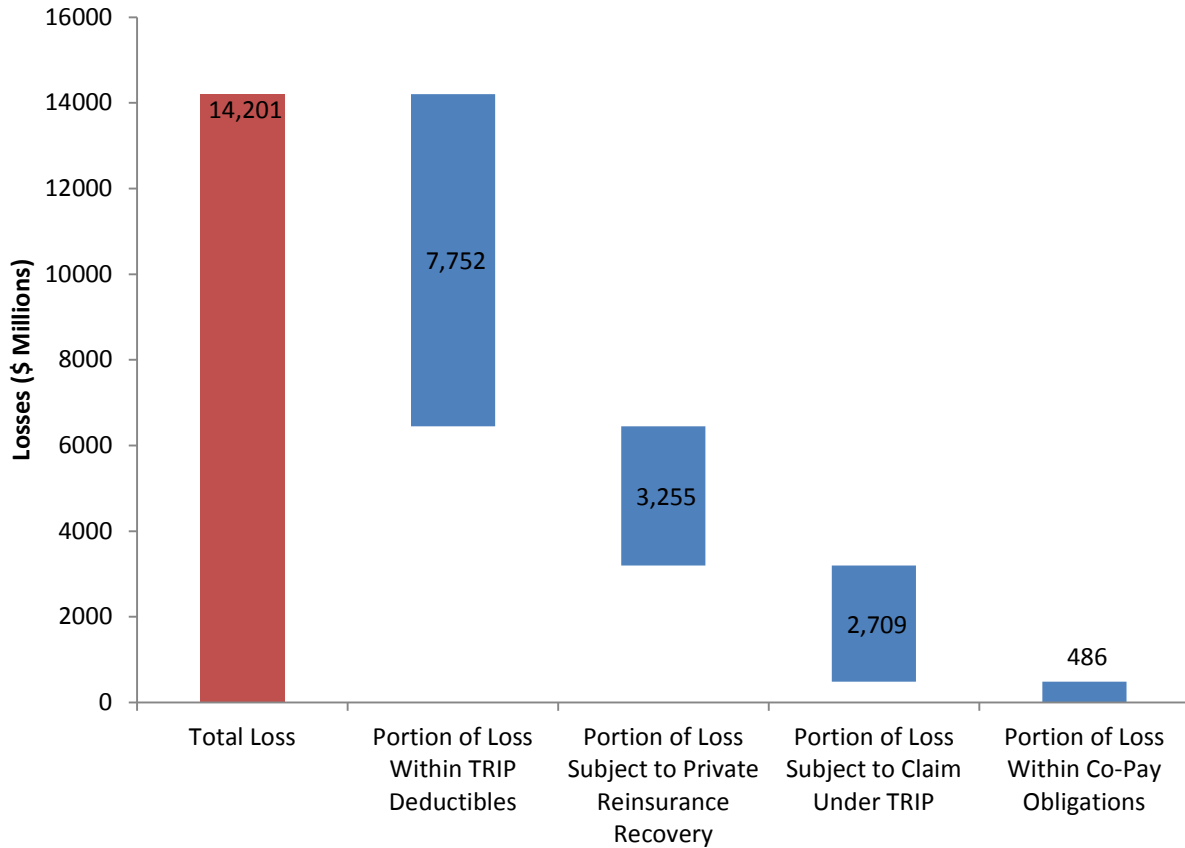
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<sup>50</sup> This is what is known as "deterministic modeling," which seeks to eliminate uncertainty respecting the manner in which losses will accumulate by defining the scope of loss to be assumed in a hypothetical scenario. It is viewed as imposing somewhat more certainty upon the analysis by eliminating certain judgment calls that might vary as between responding companies. *See, e.g.*, Guy Carpenter, *Uncertain Future: Evolving Terrorism Risk* (Global Terrorism Report) (June 2014) (GC *Uncertain Future*), at 22, *available at* [http://www.guycarpenter.com/content/dam/guycarp/en/documents/dynamic-content/Uncertain%20Future\\_Evolving%20Terrorism%20Risk\\_June%202014.pdf.Uncertain Future](http://www.guycarpenter.com/content/dam/guycarp/en/documents/dynamic-content/Uncertain%20Future_Evolving%20Terrorism%20Risk_June%202014.pdf.Uncertain%20Future).

<sup>51</sup> This figure includes the exposure of the reporting captive insurers as well, in order to capture the greatest amount of potential loss in connection with the event in question. The captive insurer portion of the \$14.2 billion figure in the aggregate (all categories combined) is about \$220 million.

<sup>52</sup> *See* above at Section II.

**Figure 7: Breakdown of Loss for Modeled Hypothetical Terrorism Attack**



Separate from this case study based on a specific hypothetical event, participating insurers were also asked to identify greatest individual probable maximum loss figures for any single hypothetical event. While a realistic scenario would not implicate the probable maximum loss associated with all Program participants at the same time, by comparing these probable maximum losses of Program participants with insurers’ deductibles under the Program, some sense can be obtained of the manner and extent to which the Program may support such insurers’ exposures. Based upon the data provided, 75 percent of insurers that reported identified a probable maximum loss above Program deductibles.

Analysis of insurer exposure arising from a particular terrorism event, and the more general calculation of a participating insurer’s probable maximum loss, are subject to limitations associated with the modeling of those exposures. As Treasury and others have observed in the past, the difficulty in modeling terrorism risk – from the standpoints of frequency and severity – has been a principal factor contributing to the existence of the Program, and the figures generated by such analysis are by no means certain.<sup>53</sup>

<sup>53</sup> See generally 2006 PWG Report, at 18-25 (given “the nature of these modeling efforts and the uncertainty attached to these probability estimates, the degree of confidence insurers will place in these modeling efforts in evaluating their risk exposures is difficult to evaluate”); GC Uncertain Future, at 22 (noting that “terrorism modeling continues to be faced by unique challenges due to its lack of acceptance by rating agencies and some markets”).

## F. Impact of Reinsurance for Terrorism Risk Insurance

Program exposure could be further reduced or minimized in the event commercial reinsurance is available. Reinsurance mechanisms support the proper functioning of insurance markets, and Treasury has evaluated in prior reports the amount of reinsurance capacity for terrorism risk since the enactment of TRIA. In past analyses, Treasury found that such capacity was limited and had remained relatively static since shortly after the September 11 Attacks.<sup>54</sup> More recently, however, industry sources suggest that reinsurers may now have a greater willingness to cover conventional (i.e., non-NBCR) terrorism risks than was indicated by these prior analyses.<sup>55</sup>

The data provided by reporting insurers, while limited, generally confirms comments indicating a greater willingness on the part of reinsurers to assume terrorism risk, particularly near or above the insurer's Program deductible. Of the 41 insurers that provided information concerning reinsurance purchases (constituting a combined Program deductible figure of \$17.3 billion), 37 (or 90 percent) reported the purchase of a total of \$21.4 billion in reinsurance coverage for a single loss resulting from terrorism. Based upon the reported figures respecting limits and retained risk applicable to any one loss, about 82 percent of that \$21.4 billion amount would fall within the co-participation obligations of the reporting insurers above Program deductible amounts, with the remaining balance of reinsurance protection reducing the net exposure of those insurers to the aggregate deductible. Some of this apparent increase in available terrorism risk reinsurance may simply be the result of general increases in available reinsurance and other cyclical factors.<sup>56</sup> Nevertheless, the reported information suggests availability of reinsurance for terrorism risk growing above the amounts observed in earlier reports.

The data may also indicate that insurers obtain terrorism risk reinsurance in connection with reinsurance placements for natural catastrophe risks. For comparison purposes, Treasury requested information about the reinsurance contract terms (i.e., amount of coverage, deductible, co-participation share, etc.) for treaties covering terrorism risk and natural catastrophe risk. In many cases, the reported reinsurance contract terms for treaties covering terrorism risk match similar terms for treaties covering natural catastrophe risk for the same insurers. Collectively, the responding insurers purchased \$23.9 billion of natural catastrophe reinsurance on a per loss basis, compared to \$21.4 billion of terrorism risk reinsurance, on a per loss basis.

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<sup>54</sup> See 2006 PWG Report, at 26 (\$6-8 billion of terrorism reinsurance capacity in 2006, \$4-6 billion in 2005), 2010 PWG Report, at 19 (estimates from \$6-8 billion to \$8-10 billion); 2014 PWG Report, at 19 (\$6-8 billion).

<sup>55</sup> See RAA Comments, at 3 (“As noted above, reinsurer appetite for conventional terrorism risks (excluding NBCR and cyber-related terrorism risks) has grown.”); ABIR Comments, at 1-2 (although asserting that “a well-capitalized insurance industry is poised to manage the largest losses which conventional terrorism attacks can cause,” acknowledging that “unconventional terrorism attacks” such as NBCR and cyber-terrorism attacks “would cause losses from which the industry would struggle to survive”).

<sup>56</sup> See generally U.S. Department of the Treasury, Federal Insurance Office, Annual Report on the Insurance Industry (September 2015), at 42 (noting continued growth in reinsurance market capacity), available at [https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2015%20FIO%20Annual%20Report\\_Final.pdf](https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2015%20FIO%20Annual%20Report_Final.pdf).

The reported information nonetheless reflects limitations on the terrorism reinsurance coverage, such as for certain geographic areas or particular risks.<sup>57</sup> Specifically, for NBCR risks, some insurers reported the purchase of reinsurance, but only as a much smaller component of the limits identified above for terrorism risk generally – for workers’ compensation risks, \$2.8 billion; for property risks, \$4.0 billion; and for other commercial (liability) exposures, \$500 million. Treasury will continue to evaluate the availability of terrorism risk reinsurance and how it relates to other risks for which reinsurance protection is sought.

## G. Captive Insurers

Captive insurers are insurers formed to insure the risks of parent or other affiliated entities. Following TRIA’s enactment, the implementing regulations clarified that U.S. domestic captive insurers that provided insurance in TRIP-eligible lines would be considered participants in the Program.<sup>58</sup> The potential exposure associated with terrorism risk insurance written by captive insurers for parent or other affiliated entities differs from that of conventional commercial insurers that must “make available” terrorism risk insurance coverage to all potential, unrelated policyholders in the TRIP-eligible lines of insurance. For captive insurers, the offer and acceptance of terrorism risk insurance under the Program is essentially controlled by the insured.

Captive insurers have not historically been required to publicly report information concerning operations. Generally, however, industry information indicates that captive insurers may issue policies for terrorism risk subject to the Program that provide coverage that might not be readily available otherwise, such as for NBCR risks, or for “trophy” properties.<sup>59</sup> Captive insurers often have premium writings (upon which Program deductible calculations are based) that are relatively small, and may be in a position to claim Program reimbursement subject to relatively low thresholds (in terms of absolute dollars), assuming that overall losses from one or more certified acts of terrorism in a given calendar year are sufficient to trigger the Program.<sup>60</sup>

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<sup>57</sup> See also U.S. Government Accountability Office, *Terrorism Insurance: Treasury Needs to Collect and Analyze Data to Better Understand Fiscal Exposure and Clarify Guidance* (May 2014) (2014 GAO Report), at 35 (finding that reinsurers frequently write terrorism risk reinsurance with specific limits for particular properties, as distinguished from a share of all properties insured by the ceding insurer), *available at* <http://www.gao.gov/assets/670/663387.pdf>.

<sup>58</sup> 31 CFR 50.5(l)(1)(i)(A) (June 2016). See also 68 Fed. Reg. 41260, (July 11, 2003)

<sup>59</sup> See U.S. Government Accountability Office, *Terrorism Insurance: Status of Efforts by Policyholders to Obtain Coverage* (September 2008) at 9, 14-16 (recognizing use of standalone coverage and captive insurance as mechanisms to obtain required terrorism risk coverage not otherwise available at reasonable prices), *available at* <http://www.gao.gov/assets/290/280918.pdf>.

<sup>60</sup> See 2010 PWG Report, at 26 & n.107 (observing that “[c]aptives are expected to have smaller insurer deductibles as compared to traditional insurers since DEP in TRIA lines is likely to be small,” but noting that total losses must still exceed the Program Trigger, such that “captives may require additional capital or reinsurance protection increasing the cost of coverage”).

Based upon the 2016 data collection, of the total TRIP-eligible premium reported by captive insurers, approximately 23 percent is for property coverage, 53 percent is for liability coverage, and 24 percent is for workers' compensation.<sup>61</sup> Within these amounts in the aggregate, 12 percent of all reported captive insurance premium is in connection with standalone terrorism risk policies – a greater percentage than the 2.5 percent indicated by the other reporting insurers (discussed above). Many captive insurers also purchased a substantial amount of reinsurance to cover terrorism risk. Approximately 88 percent of captive insurers reported the purchase of some amount of reinsurance that would cover an act of terrorism certified under TRIA.

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<sup>61</sup> Captive insurers are often unable to provide workers' compensation insurance directly to their policyholders. It is understood that much of this coverage reflects the price of reimbursement mechanisms, where the captive provides reimbursement of deductible amounts that the policyholder is responsible for under policies issued by conventional insurers subject to large deductibles. Treasury has solicited comments concerning the participation of captive insurers and other self-insurance arrangements in the Program. *See* 81 Fed. Reg. 18950, 18956-57 (Apr. 1, 2016).

## VI. Workers' Compensation Insurance

Workers' compensation insurance is a product offered by insurers to employers that covers costs related to medical care and treatment, rehabilitation, loss of wages, and other financial hardships encountered by workers resulting from workplace injuries. Workers' compensation is a TRIP-eligible line of insurance and, thus, is covered under the Program. As a matter of state law, every state with the exception of Texas<sup>62</sup> requires employers to possess some form of workers' compensation coverage to cover injured employees,<sup>63</sup> although self-insurance of workers' compensation exposures is also permitted in most states.<sup>64</sup> In addition, state laws prohibit insurers from excluding coverage for terrorism risk, including NBCR risks, in conjunction with workers' compensation coverage. Terrorism risk cannot be excluded from a policy and, therefore, the take-up rate for terrorism coverage is effectively 100% as it relates to workers' compensation insurance. Furthermore, payments under workers' compensation policies are only limited by the scope of workers' compensation benefits available under state law to employees entitled to the payment of those benefits.

NBCR events present an even more pronounced aggregation risk – where the same event causes losses to a large number of policyholders of the same insurer – than conventional terrorism claims because of the broad-based losses potentially arising from an NBCR incident.<sup>65</sup> An insurer cannot decline to write terrorism risk coverage (or the NBCR component of it) in conjunction with workers' compensation coverage, and workers' compensation insurers must find other ways in which to manage the aggregation risk. Insurers work to avoid writing policies that present substantial accumulation of exposures in the same particular location. This presents a greater issue for insurers and employers in large metropolitan areas, with greater concentrations of employees subject to workers' compensation than in less densely populated areas. For

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<sup>62</sup> In Texas, an employer (subject to certain exceptions) can decline to purchase workers' compensation insurance entirely (including for loss arising from terrorism), or otherwise qualify as a self-insurer for the exposure. However, where a Texas employer elects to remain outside of the workers' compensation system, it also remains subject to common law actions for employment-related injuries. *See generally* Texas Labor Code, Title 5 (Workers' Compensation), Chapter 401 *et seq.*

<sup>63</sup> In most states, mandatory workers' compensation coverage does not apply to the self-employed or independent contractors and, in some states, mandatory coverage does not extend to some employees in certain sectors, such as farm and domestic workers.

<sup>64</sup> *See, e.g.,* I. Sengupta & M. Baldwin, Workers' Compensation: Benefits, Coverage, and Costs, 2013 (National Academy of Social Insurance, August 2015), at 21, 23 (estimating based upon benefits payment history that self-insurance represents 25 percent of all workers' compensation), *available at* [https://www.nasi.org/sites/default/files/research/NASI\\_Work\\_Comp\\_Year\\_2015.pdf](https://www.nasi.org/sites/default/files/research/NASI_Work_Comp_Year_2015.pdf). Although self-insurers are also responsible for terrorism-related workers' compensation losses, self-insurance arrangements that are not accomplished through property and casualty insurance within the scope of TRIA are not at this time subject to the Program. *See* 18 Fed. Reg. 18950, 18956-57 (Apr. 1, 2016) (request for comments concerning the participation of captive insurance and other self-insurance arrangements in the Program).

<sup>65</sup> For example, and as compared with the results of the hypothetical five-ton truck bomb attack addressed by Treasury in the present data collection, estimates of aggregate loss arising from NBCR events have arrived at significantly higher figures. *See, e.g.,* 2006 PWG Report, at 72-73 (noting estimates of modeled NBCR event exposures up to \$158 billion in property losses and \$484 billion in workers' compensation losses); C. Meade & R. Molander, Considering the Effects of a Catastrophic Terrorist Attack (RAND Corporation 2006), at 6-7 (estimating potential losses arising from explosion of 10-kiloton nuclear bomb in a shipping container as exceeding \$1 trillion), *available at* [http://www.rand.org/content/dam/rand/pubs/technical\\_reports/2006/RAND\\_TR391.pdf](http://www.rand.org/content/dam/rand/pubs/technical_reports/2006/RAND_TR391.pdf).

employers seeking coverage in such areas, and unable to find an insurer in the voluntary market that is willing to assume the risk, the employer could be required to seek coverage from the residual market, which must provide coverage to all applicants, although such coverage likely comes with a higher premium.

Treasury also obtained comprehensive information concerning the premium charged for terrorism risk coverage for workers' compensation on an industry-wide basis from certain rating agencies and state workers' compensation funds.<sup>66</sup> Nationally, as a matter of total premium, terrorism risk coverage for workers' compensation coverage is provided for a disclosed premium of \$0 approximately 18.1 percent of the time as measured by total premium. When an insurer assesses a premium for terrorism coverage, the average figure is 1.6 percent of the total premium charged in such policies, although this figure varies state-to-state.<sup>67</sup> The high of 10.41 percent (in the District of Columbia) contrasts with a low of 0.44 percent (in Alaska), and results in a median figure of 1.08 percent.<sup>68</sup>

The issues that terrorism risk present to the workers' compensation market are not driven by TRIA, as the potentially significant concentration risks faced by insurers participating in this market arise as a matter of state law requirements. TRIA does, however, provide a backstop that will operate as a spreading mechanism if a large concentration of workers' compensation exposures in a particular location might fall disproportionately upon some small number of participating insurers, and potentially present solvency issues. In this circumstance, the Program provides participating insurers with a backstop which could be important in a significant loss situation.<sup>69</sup>

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<sup>66</sup> Treasury appreciates the information (and insights) provided by the National Council on Compensation Insurance, the Workers' Compensation Insurance Rating Bureau of California, North Dakota Workplace Safety & Insurance, the Ohio Bureau of Workers' Compensation, the Washington State Fund, and the Wyoming Department of Workforce Services.

<sup>67</sup> These figures are somewhat different than those indicated by the data provided to Treasury, which reflected that 18.4 percent of workers' compensation premium is under policies in which terrorism risk insurance was provided for a \$0 premium, and that an average charge of 2.8 percent of premium was made when a charge was assessed.

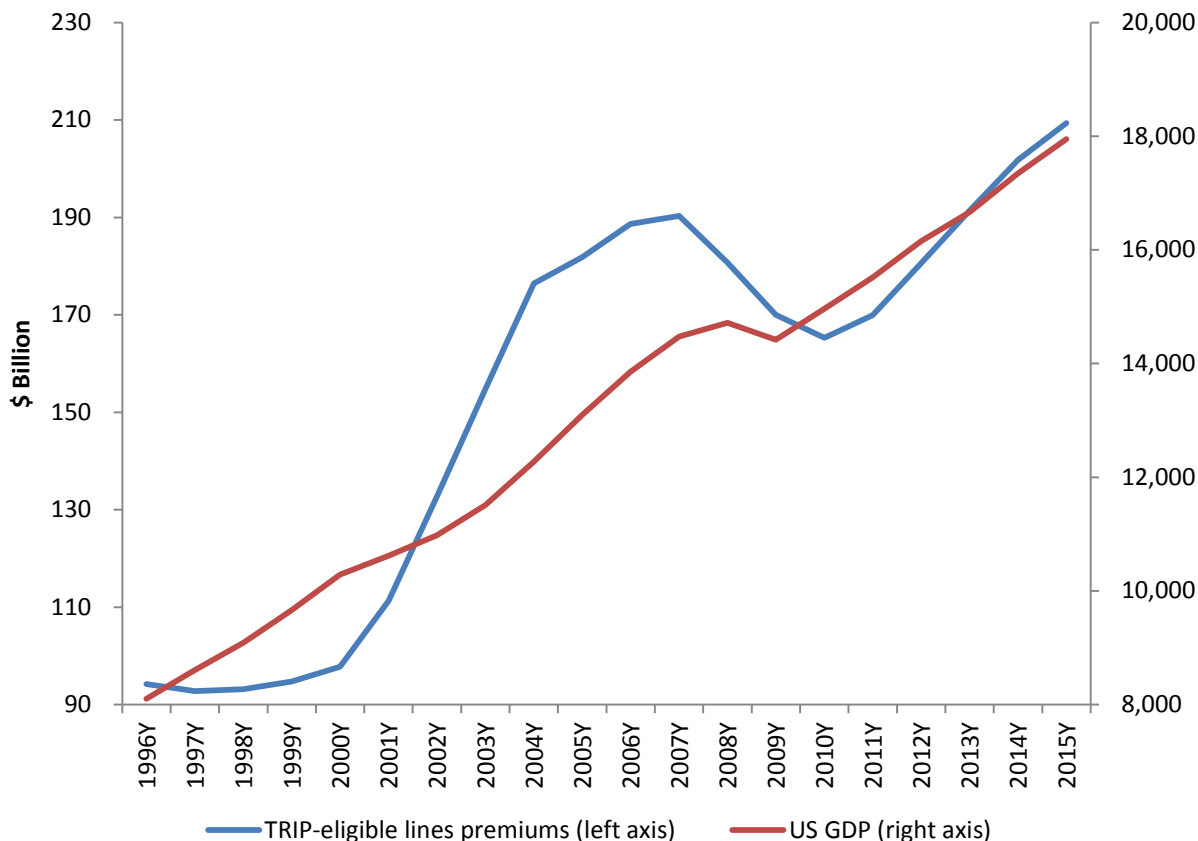
<sup>68</sup> The only jurisdictions where the disclosed premium charge is on average in excess of 2 percent of total policy premiums are the District of Columbia, New York, Massachusetts, Virginia, Maryland, Illinois, and Texas.

<sup>69</sup> Many of the comments received echoed the point that TRIA effectively allows insurers to continue to participate in the workers' compensation insurance markets when, in the absence of a government backstop for the terrorism risk, they might be forced from the market altogether. *See, e.g.*, CIAB Comments, at 2-3 (because workers' compensation laws do not allow for policy exclusions prevalent in other lines, workers' compensation "continues to pose some coverage, capacity and pricing challenges . . . on the largest accumulations in key large cities and central business districts," and noting some resulting market instability on account of the uncertainty over the renewal of TRIP at the end of 2014); PCIAA Comments, at 2 (Because of the inability to exclude any sort of terrorism risk from their policies, "to workers compensation insurers the TRIP is even more essential to allowing insurers to be able to participate in the market at all. Absent TRIP, most small and medium sized insurers would be precluded from the workers compensation market, altogether."); RAA Comments, at 2 ("Without TRIP, workers compensation insurers would likely avoid target risks, including risks with high populations of employees in one location or risks in urban areas."); NAMIC Comments, at 5-6 ("Workers compensation writers are not permitted to exclude any peril from their coverages and are particularly susceptible to having highly concentrated losses in the event of a major terrorist attack. Without a federal backstop, workers' compensation insurers will bear the entire financial burden of losses due to a terrorist attack because reinsurers have shown an unwillingness to accept this potentially devastating risk or to offer affordable limits to protect the solvency of these companies.").

## VII. Impact of the Program on Property and Casualty Insurance and Coverage for Terrorism Risk

On a long-term basis, premium revenues for TRIP-eligible lines (as distinguished from the terrorism risk component of the premium) have generally increased over time,<sup>70</sup> with the exception of a temporary decrease coinciding with the financial crisis.

**Figure 8: TRIP-Eligible Premiums vs. U.S. GDP**



The ratio of the average deductible and the average policyholder surplus for small, medium, and large insurers has stayed relatively constant over time, thus indicating that the concentration levels within industry by size of insurers writing TRIP-eligible lines coverage have stayed relatively consistent since the Program has been in place. The data also suggests – at least on the average – that these figures<sup>71</sup> do not present in the majority of cases a substantial risk to

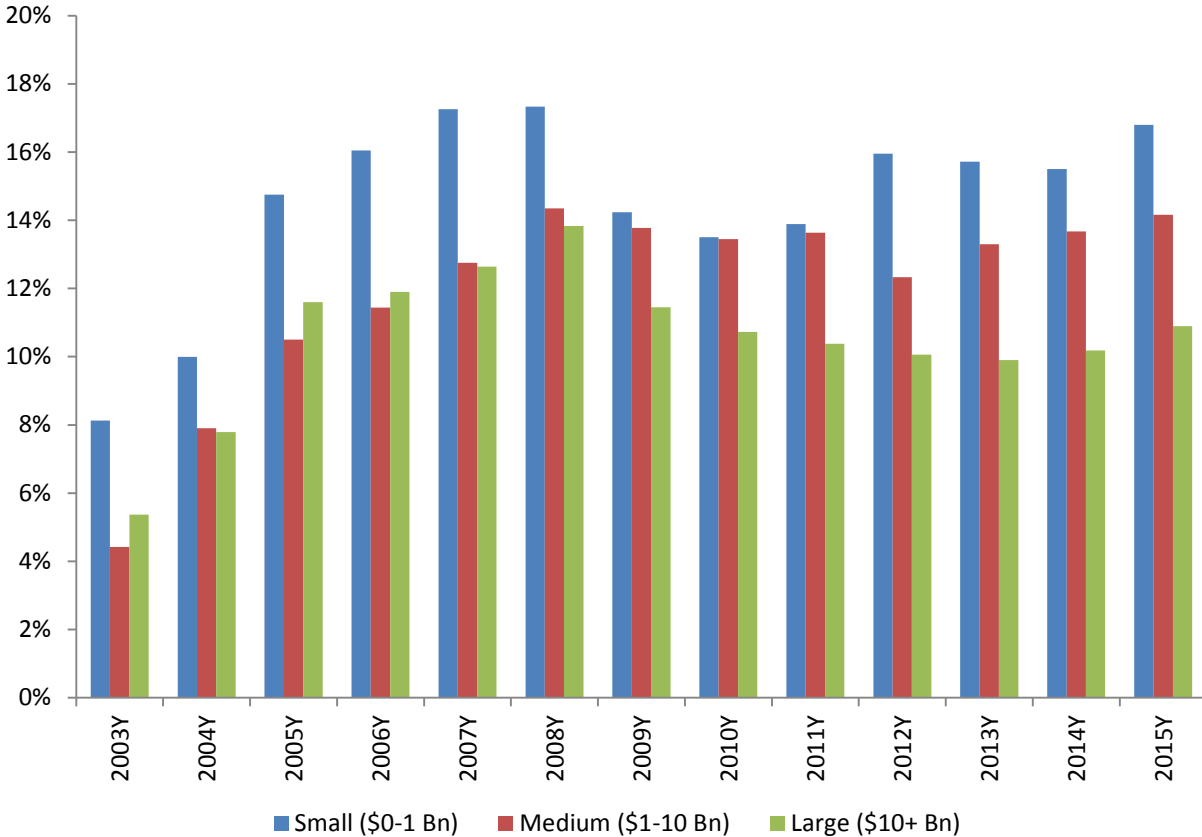
<sup>70</sup> Some variances in the data result from the changes in TRIP-eligible lines of insurance coverage by the Program (this accounts for the drop in the amount of TRIP-eligible premium beginning in 2006), as well as from changes in how such data has been reported over the relevant period. In general terms, once these anomalies are accounted for, TRIP-eligible premium has generally increased (or decreased) in correlation to GDP.

<sup>71</sup> This chart only analyzes the deductible figures against surplus with respect to participating insurers whose TRIP-eligible lines premium writings are more than 50 percent of their total premium writings, given that carriers in this group would be more likely to be faced with a terrorism-related loss that might adversely impact policyholder



solvency, at least given the presence of TRIA, in the event of a significant terrorism loss. The relative risk faced by smaller insurers, however, may be more significant.

**Figure 9: TRIP Deductible vs. Policyholder Surplus (by Insurer Size)**



The analyses above are based upon the premiums collected for TRIP-eligible lines, which is only a surrogate for the manner in which Program requirements may be having an impact upon the provision of commercial property and casualty insurance generally, or coverage for acts of terrorism specifically. Treasury will continue to evaluate this issue as it continues to collect data concerning the Program through the current reauthorization period.<sup>72</sup>

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surplus levels. Measured against all insurers that write any TRIP-eligible lines insurance, the average size of insurer deductibles against surplus drops to levels in the 5-10 percent range.

<sup>72</sup> The commenters who addressed this issue generally concluded that the Program actually facilitates the ability of insurers to continue to provide property and casualty insurance, although most of those comments were focused in particular on the workers' compensation line. *See* above at 22 n.69.

## VIII. Terrorism Risk Earned Premiums Over Time

Insurers have been collecting premiums associated with terrorism risk in connection with the Program since late 2002. Treasury has not previously collected aggregated data related to the premiums charged by participating insurers for coverage associated with the Program.<sup>73</sup> Beginning with 2004, however, A.M. Best, the insurance rating organization, has collected terrorism risk premium information from the insurers subject to its ratings.<sup>74</sup> This information is available through 2013. Taking these figures, and adding estimates for the years 2003, 2014 and 2015 (for 2003, based upon estimates from Treasury’s 2005 Report, and for 2014 and 2015, based upon Treasury’s recent data collection and extrapolation from the prior A.M. Best figures), a total figure of \$24.24 billion for the entire period is indicated:<sup>75</sup>

**Figure 10: Charged Terrorism Risk Premium, 2003-2015**

Year	Total Terrorism Risk Premium (billion)
2003	\$1.50 (est.)
2004	\$1.97
2005	\$1.99
2006	\$1.90
2007	\$2.05
2008	\$2.01
2009	\$1.75
2010	\$1.61
2011	\$1.65
2012	\$1.66
2013	\$1.80
2014	\$2.05 (est.)
2015	\$2.30 (est.)
<b>Total</b>	<b>\$24.24</b>

<sup>73</sup> Although Treasury requested that reporting insurers identify total terrorism risk premiums charged since the inception of the Program, Treasury was advised during its engagement with stakeholders during which the data requests were formulated that there would likely be difficulties with data availability concerning information going back for more than a decade, which is borne out by the response rate for this information.

<sup>74</sup> Treasury appreciates the willingness of A.M. Best to provide and interpret this data.

<sup>75</sup> In nominal dollars as collected in each year.

This amount may be understated because it is based in part upon charges as reported to A.M. Best, which does not rate every participating insurer, and presumably not every insurer completed the supplemental rating questionnaire in all years.<sup>76</sup> However, given that A.M. Best has evaluated the vast majority of insurers that write TRIP-eligible insurance lines, the A.M. Best data likely provides a reasonable estimate of terrorism risk premium that was charged and collected during the 2004-2013 period. When adjusted for the missing years, the figure of \$24.24 billion is premised upon the best information available.

The relative cost to a policyholder of terrorism risk premium as a component of total TRIP-eligible premium (once adjusted for the take-up rate) has generally been declining over time, even as the exposure of participating insurers has been increasing on account of the changes to the Program placing more risk upon participating insurers. This trend has been observed in prior reports.<sup>77</sup> However, the terrorism risk premium that has been collected by insurers since 2003 has not been used for the payment of even a single claim. The premium has thus contributed, at least to a modest extent, to increases in the surplus levels of participating insurers that have been observed since 2003.<sup>78</sup> In general, higher surplus levels make such insurers more likely to remain solvent following a significant terrorism loss.<sup>79</sup>

Terrorism risk is a potential catastrophic loss exposure that is not subject to predictive pricing based upon substantial prior loss history and presents significant modeling challenges. Terrorism risk presents difficult questions concerning the pricing of the exposure and the associated cost of capital necessary to support the risk insured. Some portion of the premium collected since 2003 for terrorism risk clearly represents the appropriate cost of the capital that insurers must devote to surplus to support the provided terrorism risk insurance, as required by TRIA. To the extent participating insurers continue to collect terrorism risk premium in the absence of any loss history, however, policymakers may consider whether some amount of the premiums charged for terrorism risk should be segregated in some fashion to support future terrorism risk. Actuarial science – even before the September 11 Attacks – recognizes that such public policy considerations may be inherent in catastrophe risk exposures where governmental mechanisms facilitate operation of the relevant market.<sup>80</sup>

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<sup>76</sup> A.M. Best believes that most companies that it rated during this entire period would have completed the questionnaire and provided the requested information. *See also* GAO 2014 Report at 21 n.41 (“Although these data may not reflect the entire market, they are the best available data because insurers are not required to report terrorism insurance premiums to Treasury or NAIC. . . . A.M. Best does not know exactly what proportion of the market the estimated premiums charged for terrorism coverage equal, but company representatives believe the information encompasses the vast majority of the terrorism insurance market.”).

<sup>77</sup> *See, e.g.*, 2006 PWG Report, at 1; 2010 PWG Report, at 32; 2014 PWG Report, at 38.

<sup>78</sup> Source: SNL Financial.

<sup>79</sup> *See, e.g.*, 2014 GAO Report, at 40 & n.74 (noting role of policyholder surplus in supporting insurance and reinsurance for terrorism coverage); 2006 PWG Report, at 45-46 (noting correlation, albeit imperfect, between policyholder surplus and terrorism risk capacity).

<sup>80</sup> *See generally* American Academy of Actuaries, *Catastrophe Exposures and Insurance Industry Catastrophe Management Practices* (June 10, 2001) at 18-22, *available at* [http://www.actuary.org/pdf/casualty/catastrophe\\_061001.pdf](http://www.actuary.org/pdf/casualty/catastrophe_061001.pdf).

## IX. Conclusion

The data collected by Treasury in 2016 shows that the Program remains an important mechanism in ensuring that terrorism risk insurance remains available and generally affordable in the United States. Viewed on a national basis, the coverage being made available is comprehensive and would likely not be possible in the absence of the Program. Although some regional differences exist, premiums for terrorism risk insurance generally remain a relatively small percentage of total premiums for TRIP-eligible lines policies as a whole, and in many cases insurers report the coverage is provided for a disclosed premium of \$0. The take-up rate for terrorism insurance may be somewhat lower in certain areas where the risk presented may be greater. This presents the possibility that some consumers may encounter difficulty in obtaining coverage in those regions where it may be most needed, or, perhaps, coverage is addressed by standalone policies and non-traditional risk mechanisms such as captive insurers, although the data currently available is not dispositive.

The most recent information from the credit rating agencies shows that insurers have been seeking to lower net terrorism exposures.<sup>81</sup> The data collected by Treasury in 2016 is consistent with this observation. This reduction in concentration of exposure, coupled with the manner in which the Program is currently structured, indicates that an extremely large terrorism event would be necessary to trigger Federal payments under the Program that would not be entirely recovered through the recoupment mechanism. Continued evaluations will focus on whether the terrorism risk insurance market is operating in a fashion that allows coverage to be available and affordable to all commercial segments of the economy.

No evidence shows that coverage would be more available in the absence of the Program. Rather, costs would presumably increase and availability decrease, at least in certain areas. In the specific area of workers' compensation, given the manner in which such coverage is required to be provided as a matter of state law, the absence of the Program may result in insurers exiting from that market.

The data collected indicates that reinsurance capacity for terrorism risk may be higher than has been estimated in prior analyses, with reinsurers providing significant protection above an insurer's Program deductible. However, this reinsurance may be much more highly concentrated in embedded market risks and the availability of reinsurance remains limited for perceived target areas and for NBCR risks, where aggregation issues are most critical.

Terrorism risk is a catastrophic exposure characterized by a very low frequency of potentially very high exposures. As a result, premiums are difficult to support with actuarial precision, thus leading to the risk of either a clear shortfall in claim reserves in certain periods or – as has been

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<sup>81</sup> See A.M. Best, "Industry's Exposure Lowered in Tandem with TRIPRA Extension (February 3, 2016) (finding based upon 2015 responses to terrorism questionnaires that "[i]nsurers appear to have a lessened risk appetite for insuring terrorism exposures, as expressed by the decline in gross and net exposures, the increase in the percentage of ceded premium, and the greater number of rating units passing the stress test" as compared to a prior 2013 study), available at <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?altsrc=23&refnum=189030>. As noted above, the greater amount of reinsurance that may be available would result in a decrease in the net exposure of participating insurers.

the case since the Program was established – premiums which have not been needed to support claims payments. Given the nature of terrorism risk, such an issue may be unavoidable. Furthermore, insurers face a clear cost of capital when making available terrorism risk insurance that must be supported by an appropriate charge. These topics will continue to be evaluated as the Program remains in effect.

Treasury acknowledges the contributions of insurers that provided information in this voluntary call for information concerning the Program. This initial production of information will be important to future collection of information and to aid Treasury's analysis of the overall effectiveness of the Program. However, because the data collection was voluntary, and was the first attempt at obtaining comprehensive data that had not been collected before, conclusions to be drawn from this data are necessarily limited. Although the observations in this Report are supported by data collected in 2016, such observations may change when more comprehensive data is obtained in the coming years.

Treasury has published a notice of proposed rulemaking that would implement a number of changes under the 2015 Reauthorization Act, including a proposed rule requiring mandatory submission of information by participating insurers beginning in calendar year 2017.<sup>82</sup> Treasury will continue to evaluate the data collected in 2016, as well as the experiences of reporting insurers in providing the data, to determine whether and, if any, what changes might be made in the collection process to obtain responsive information. As Treasury continues to collect data concerning the Program pursuant to the requirements of the 2015 Reauthorization Act, it will analyze any identifiable trends in the data.

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<sup>82</sup> See 81 Fed. Reg. 18950, 18966-67 (Apr. 1, 2016) (to be codified at 31 CFR 50.51).