

# Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace

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

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## Glossary

2015 Reauthorization Act	.....	Terrorism Risk Insurance Program Reauthorization Act of 2015, Pub. L. 114-1, 129 Stat. 3
2016 Effectiveness Report	.....	FIO, Report on the Overall Effectiveness of the Terrorism Risk Insurance Program (June 2016)
2017 Small Insurer Study	.....	FIO, Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace (June 2017)
2018 Effectiveness Report	.....	FIO, Report on the Overall Effectiveness of the Terrorism Risk Insurance Program (June 2018)
Act of Terrorism	.....	Under TRIA, an act certified as terrorism by the Secretary, in consultation with the Attorney General and the Secretary of Homeland Security
Alien Surplus Lines Insurer	.....	Non-U.S. insurer that is an eligible surplus lines insurer as listed on the National Association of Insurance Commissioners' Quarterly Listing of Alien Surplus Lines Insurers
Captive Insurer	.....	Insurer formed to insure the risk exposures of its policyholder owner(s), which is regulated by the captive insurance laws of a particular state jurisdiction
CMP	.....	Commercial Multi-Peril
Co-Pay Share	.....	The percentage of losses that an insurer is obligated to pay after meeting its deductible and the Program Trigger is satisfied. The federal government is responsible for the remaining percentage of losses above the insurer's deductible. The co-pay share for CY 2018 was 18 percent
CY	.....	Calendar year
DEP	.....	Direct earned premium
Embedded Terrorism Insurance	.....	Terrorism insurance provided within a P&C policy that also covers other risks
Federal Share of Compensation	.....	The percentage of an insurer's losses that the federal government will pay after the insurer meets its deductible and the Program Trigger is satisfied. The insurer is responsible for the remaining percentage of losses above its deductible. The federal share of compensation for CY 2018 was 82 percent.

FIO	.....	Federal Insurance Office
Insurer Deductible	.....	The amount an individual insurer must pay before receiving the federal share of compensation, after an event is certified as an act of terrorism and the Program Trigger is exceeded. An insurer's deductible is 20 percent of its TRIP-eligible DEP in the prior year
NBCR	.....	Nuclear, biological, chemical, or radiological
P&C	.....	Property and casualty
PML	.....	Probable maximum loss
Program	.....	Terrorism Risk Insurance Program (also, TRIP)
Program Cap	.....	Maximum aggregate exposure limit for the federal government and insurers under TRIP in any calendar year
Program Trigger	.....	Minimum amount of insurance industry aggregate insured losses resulting from certified act(s) of terrorism that must occur in a calendar year before any federal payments can be made under TRIP
Standalone Policy	.....	Insurance policy which provides coverage only for terrorism risk
Study	.....	FIO, Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace (June 2019)
Secretary	.....	Secretary of the Treasury
September 11 Attacks	.....	Terrorist attacks occurring on September 11, 2001
Small Insurer	.....	An insurer as defined under 31 C.F.R. § 50.4(z)
Take-Up Rate	.....	Extent to which terrorism risk insurance is purchased by policyholders
Treasury	.....	U.S. Department of the Treasury
TRIA	.....	Terrorism Risk Insurance Act of 2002, as amended
TRIP	.....	Terrorism Risk Insurance Program (also, Program)
TRIP-Eligible Lines of Insurance	.....	Commercial P&C insurance subject to the TRIP pursuant to 31 C.F.R. § 50.4(w)
WC	.....	Workers' Compensation



## I. INTRODUCTION AND EXECUTIVE SUMMARY

Under the Terrorism Risk Insurance Program Reauthorization Act of 2015 (2015 Reauthorization Act),<sup>1</sup> the Secretary of the Treasury (Secretary) is required to conduct a study of small insurers participating in the Terrorism Risk Insurance Program (TRIP or Program) and identify any competitive challenges small insurers face in the terrorism risk insurance marketplace. The study must identify:

- A. changes to the market share, premium volume, and policyholder surplus of small insurers relative to large insurers;
- B. how the property and casualty insurance market for terrorism risk differs between small and large insurers, and whether such a difference exists within other perils;
- C. the impact of the Program's mandatory availability requirement on small insurers;
- D. the effect on small insurers of increasing the Program Trigger;
- E. the availability and cost of private reinsurance for small insurers; and
- F. the impact that state workers' compensation laws have on small insurers and workers' compensation carriers in the terrorism risk insurance marketplace.<sup>2</sup>

The findings and conclusions of the study must be submitted in a report to Congress no later than June 30, 2019 (Study).<sup>3</sup>

The 2015 Reauthorization Act also requires the Secretary to collect Program data on an annual basis.<sup>4</sup> The Federal Insurance Office (FIO) assists the Secretary in Program administration.<sup>5</sup>

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<sup>1</sup> Terrorism Risk Insurance Program Reauthorization Act, Pub. L. 114-1, 129 Stat. 3 (2015). The provisions of the Terrorism Risk Insurance Act of 2002 (TRIA), Pub. L. No. 107-297, 116 Stat. 2322 (2002), as amended (including the 2015 Reauthorization Act), appear in a note of the United States Code (15 U.S.C. § 6701 note), and, therefore, references to the provisions of TRIA or the 2015 Reauthorization Act are identified by the sections of the law [e.g., "TRIA § 102(1) (definition of an "act of terrorism")"].

<sup>2</sup> TRIA § 108(h).

<sup>3</sup> The 2015 Reauthorization Act required the Secretary to submit a report on the findings and conclusions of the small insurer study to Congress no later than June 30, 2017, and every other June 30 thereafter through the Program's expiration date of December 31, 2020. Treasury published a report on its first small insurer study on June 30, 2017. See Federal Insurance Office, U.S. Department of the Treasury, *Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace* (2017), [https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/Study\\_of\\_Small\\_Insurer\\_Competitiveness\\_in\\_the\\_Terrorism\\_Risk\\_Insurance\\_Marketplace\\_\(June\\_2017\).pdf](https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/Study_of_Small_Insurer_Competitiveness_in_the_Terrorism_Risk_Insurance_Marketplace_(June_2017).pdf). This report addresses Treasury's findings and conclusions from its second small insurer study, described further in Section V.

<sup>4</sup> TRIA § 104(h)(1).

<sup>5</sup> Federal Insurance Office Act of 2010, 31 U.S.C. §313(c)(1)(D) (2012).

Since the 2015 Reauthorization Act, the U.S. Department of the Treasury (Treasury) has conducted four data calls – a voluntary call in 2016 seeking calendar year (CY) 2015 data, and three mandatory calls in 2017, 2018, and 2019 requiring, respectively, the production of CY 2016, 2017, and 2018 data. This Study addresses the six statutory considerations identified above, and uses information from the 2017, 2018, and 2019 TRIP data calls.

Based on analysis of the collected information and identified issues, Treasury has reached the following conclusions:

- A. Small insurer direct earned premium (DEP) in the TRIP-eligible lines of insurance and policyholder surplus has remained relatively constant over the past decade, but total market share within the TRIP-eligible lines of insurance has slightly declined relative to larger (non-small) insurers over the past decade. Refer to Section V.A.
- B. Numerous market differences exist between small insurers and larger (non-small) insurers. Refer to Section V.B.
  - 1. Small insurers allocate a lower percentage of DEP for terrorism risk insurance than do non-small insurers, and small insurers are more likely than larger insurers to charge no premium for terrorism risk insurance. Small insurers tend to provide coverage in fewer states than do non-small insurers, and small insurers earn a higher percentage of DEP in the commercial multi-peril (CMP) and workers' compensation lines than do non-small insurers.
  - 2. Small insurers issue a very limited number of policies for standalone terrorism insurance.
  - 3. Small insurers are participating in the cyber insurance market covered under the TRIP-eligible lines of insurance, although at different premium levels and terrorism risk insurance take-up rates than other market participants.
  - 4. Small insurers are more likely than non-small insurers to exclude coverage for nuclear, biological, chemical, and radiological (NBCR) risks from their terrorism risk insurance coverage. However, their reported limits still indicate that they may have a significant aggregate exposure associated with such losses.
  - 5. The participation of small insurers in the lines of insurance covered by TRIP is slightly higher than their share in property and casualty (P&C) insurance lines not covered by TRIP.
- C. The mandatory availability requirement appears to affect small insurer participation in the terrorism risk insurance market by causing them to assume more terrorism risk exposure than they might otherwise provide absent the requirement. However, the Program's backstop provisions address some of the potential risk posed by this increased aggregate loss exposure. Refer to Section V.C.

- D. Small insurers could sustain significant terrorism losses without federal backstop support if their losses fail to satisfy the Program Trigger. This could have a negative effect on small insurers, potentially causing financial distress and ratings downgrades. Refer to Section V.D.
- E. Small insurers cede a higher percentage of their DEP to purchase reinsurance than do non-small insurers. Reinsurance purchases covering terrorism risk have increased, but some small insurers do not purchase enough private reinsurance to cover the potential gap between a small insurer's individual deductible and the Program Trigger. In addition, small insurers purchase less reinsurance for NBCR-related terrorism risk than for conventional terrorism risk. Refer to Sections V.E and V.F.
- F. Workers' compensation insurance cannot exclude coverage for either conventional or NBCR-related terrorism losses. Therefore, workers' compensation remains a difficult exposure from a terrorism risk standpoint for the insurance market. Small insurers face an elevated risk for workers' compensation losses given that a higher percentage of their TRIP-eligible DEP is from workers' compensation policies. The limited availability of NBCR reinsurance further increases this risk. Refer to Section V.F.

## II. BACKGROUND

Prior to September 11, 2001, commercial P&C insurance policies generally did not exclude coverage for losses resulting from terrorism. The events of September 11, 2001 (September 11 Attacks) resulted in approximately \$46 billion of P&C insurance losses, more than two-thirds of which were reimbursed by reinsurers to insurers.<sup>6</sup> Following the September 11 attacks, insurers and reinsurers began to exclude coverage for terrorism risk from commercial P&C policies.

The Terrorism Risk Insurance Act of 2002 (TRIA) was enacted, in part, because the 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>7</sup> TRIA established the Program, which requires insurers to make terrorism risk coverage available within certain lines of commercial P&C insurance (TRIP-eligible lines of insurance).<sup>8</sup> To assist insurers with the potential financial exposure resulting from this required offer of terrorism risk insurance, certain insurance losses resulting from an “act of terrorism” as defined by TRIA and certified as such by the Secretary are eligible for reimbursement through the Program.<sup>9</sup> The Program is housed in Treasury and administered by the Secretary with the assistance of FIO.<sup>10</sup>

TRIA originally authorized the Program for a three-year period ending December 31, 2005. The Program has since been reauthorized three times,<sup>11</sup> most recently by the 2015 Reauthorization Act, which extended the Program through December 31, 2020.<sup>12</sup> Changes enacted with each

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<sup>6</sup> Insured losses shown in 2018 dollars. See Willis Towers Watson, *The Terrorism Pool Index: Review of Terrorism Insurance Programs in Selected Countries 2018/2019* (2019), 35, <https://www.willistowerswatson.com/-/media/WTW/PDF/Insights/2018/11/Terrorism-Pool-Index-Nov.pdf> (as adjusted from 2016 to 2018 dollars).

<sup>7</sup> TRIA § 101(a)(5).

<sup>8</sup> See TRIA § 103(c). Treasury has implemented regulations defining the “TRIP-eligible lines of insurance” with reference to certain 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. 31 C.F.R. § 50.4(w)(1) (2018). Some of these lines also contain personal P&C premium exposures that are not subject to the Program. There are also certain other defined exclusions within these lines. See 31 C.F.R. § 50.4(w)(2).

<sup>9</sup> Further details on Program operation are provided in Section III of this Study.

<sup>10</sup> Federal Insurance Office Act of 2010, 31 U.S.C. § 313(c)(1)(D) (2012).

<sup>11</sup> See Terrorism Risk Insurance Extension Act of 2005, Pub. L. 109-144, 119 Stat. 2660 (2005); Terrorism Risk Insurance Program Reauthorization Act of 2007, Pub. L. 110-160, 121 Stat. 1839 (2007); 2015 Reauthorization Act.

<sup>12</sup> Treasury issued rules in December 2016 to implement changes to TRIA under the 2015 Reauthorization Act, and for other purposes. See Terrorism Risk Insurance Program; Certification, 81 Fed. Reg. 88592 (December 7, 2016), <https://www.govinfo.gov/content/pkg/FR-2016-12-07/pdf/2016-29313.pdf>; Terrorism Risk Insurance Program, 81 Fed. Reg. 93756 (December 21, 2016), <https://www.govinfo.gov/content/pkg/FR-2016-12-21/pdf/2016-29987.pdf>.



Program renewal have generally reduced potential federal exposure to insured losses and increased private market exposure.

### III. TERRORISM RISK INSURANCE PROGRAM

The Program requires that each entity meeting the definition of an insurer make available coverage for insured losses resulting from acts of terrorism.<sup>13</sup> This offer must “not differ materially from the terms, amounts, and other coverage limitations applicable to losses arising from events other than acts of terrorism.”<sup>14</sup> The “make available” requirement applies only to TRIP-eligible lines of insurance.<sup>15</sup> TRIA does not mandate that insurers offer terrorism risk insurance at a particular price,<sup>16</sup> nor does TRIA require any policyholder to purchase insurance for terrorism risk.<sup>17</sup> All commercial P&C insurers writing in TRIP-eligible lines and required to make terrorism risk insurance available under their policies are considered Program participants, regardless of whether their policyholders accept the offer to take up the coverage.

Insurers are eligible for federal payments under the Program only for losses resulting from “acts of terrorism.” An act of terrorism is defined under TRIA as 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>18</sup> 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.<sup>19</sup>

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<sup>13</sup> An insurer is defined under TRIA as 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 aircraft 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> TRIA § 103(c)(2).

<sup>15</sup> Reinsurance is excluded from the TRIP-eligible lines of insurance. TRIA § 102(11)(B)(vii). Issues concerning the availability of private reinsurance for terrorism risk are discussed further below in Sections V.E and V.F.

<sup>16</sup> State insurance rating laws and regulations may affect the price that insurers can charge for terrorism risk insurance subject to TRIA.

<sup>17</sup> In some circumstances, state law may require the purchase of (or limit the ability to exclude) coverage for terrorism risk, such as in the case of workers’ compensation insurance, discussed further below in Section V.F.

<sup>18</sup> TRIA also provides that an act of terrorism may occur outside the United States in the case of certain air carriers or vessels, or on the premises of a U.S. mission. TRIA § 102(1)(A)(iii).

<sup>19</sup> TRIA § 102(1)(A).

Additionally, the Secretary may not certify an act that results in P&C insurance losses totaling \$5 million or less,<sup>20</sup> or that was committed as part of the course of a war declared by Congress.<sup>21</sup>

If the Secretary certifies an act of terrorism, participating insurers may submit claims to Treasury, and Treasury will determine whether, and in what amounts, insurers are eligible for payments under the Program.<sup>22</sup> Treasury must then obtain reimbursement of certain payments of the federal share of compensation through a recoupment process, and may require reimbursement of additional payments depending on the amount of total losses.

A participating insurer's recovery under the Program is based on a number of factors, including its individual insurer deductible, the Program Trigger, the federal share of compensation of an insurer's losses, and the Program Cap. These factors are described in greater detail below.

### **Insurer Deductible**

After the Secretary certifies one or more acts of terrorism, two prerequisites must be met before an insurer is eligible for Program payments from Treasury: (1) the insurer's losses must exceed its deductible (as defined under the Program); and (2) the Program Trigger must be satisfied. TRIA defines an individual insurer's deductible as 20 percent of the insurer's DEP in the TRIP-eligible lines for the prior calendar year.<sup>23</sup>

### **Program Trigger**

The Program Trigger is the minimum amount of insurance industry aggregate insured losses resulting from a certified act (or acts) of terrorism that must occur in a particular calendar year before Treasury can make any federal payments. The Program Trigger was \$160 million in CY 2018 (the principal year addressed by this Report);<sup>24</sup> it will continue to increase by \$20 million per calendar year until it reaches \$200 million in 2020.<sup>25</sup> Once the Program Trigger has been

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<sup>20</sup> TRIA § 102(1)(B)(ii).

<sup>21</sup> This limiting clause regarding an act of war does not apply to coverage under the Program for workers' compensation insurance. TRIA § 102(1)(B)(i).

<sup>22</sup> Treasury makes all determinations pursuant to the Program regulations. *See* 31 C.F.R. Part 50.

<sup>23</sup> TRIA § 102(7).

<sup>24</sup> TRIA § 103(e)(1)(B). The 2015 Reauthorization Act changed certain Program mechanics from the date of the 2015 Reauthorization through the expiration date for the Program in 2020. This Study focuses upon the Program structure in place in 2018 because much of the FIO's analysis is based on the 2019 TRIP data call, which collected year-end data for CY 2018.

<sup>25</sup> TRIA § 103(e)(1)(B). TRIP did not originally have a Program Trigger. This requirement was introduced in the 2005 Extension Act. It was initially set at \$50 million (for losses occurring in 2006), and increased to \$100 million for losses occurring in 2007. When TRIP was reauthorized through 2014 in the 2007 Reauthorization Act, no change was made to the Program Trigger, which remained at \$100 million. The 2015 Reauthorization Act,

satisfied, Treasury will make payments to individual insurers for the federal share of compensation above their respective deductibles.

### **Federal Share of Compensation**

After an insurer meets its deductible and the Program Trigger is satisfied, the federal government will pay a certain percentage of that insurer's losses in excess of the insurer's deductible. For CY 2018, the federal share of compensation was 82 percent of an insurer's losses above its deductible, with the insurer responsible for the remaining 18 percent. The federal share of compensation will continue to decrease (and the insurer share will correspondingly increase) by one percentage point per year through 2020, at which time the federal share of compensation will be 80 percent and the insurer share will be 20 percent.<sup>26</sup>

### **Program Cap**

TRIA limits the aggregate insured loss exposure of both insurers and the federal government arising from one or more acts of terrorism. Specifically, TRIA prohibits the Secretary from making payments for any portion of aggregate insured losses (including amounts paid by Program participants and the federal government) from acts of terrorism which exceed the Program Cap of \$100 billion during any calendar year.<sup>27</sup> If the Program Cap is reached, an insurer that has met its insurer deductible by making payments for insured losses subject to the Program is not liable for any portion of losses that exceeds the Program Cap.<sup>28</sup>

### **Recoupment**

The Secretary will collect "terrorism loss risk-spreading premiums" from insurers if federal payments are made to insurers. Under this mechanism, known as recoupment, Program participants may be required to collect funds from policyholders by placing a surcharge on insurance policies written in TRIP-eligible lines. The surcharges will be set based upon the amount that must be recovered by Treasury and the time within which they must be recovered, as required by TRIA. Insurers must then remit these surcharges to the Secretary.<sup>29</sup> The requirement to collect, or recoup, terrorism loss risk-spreading premiums applies not only to insurers that received federal payments under the Program, but also to all insurers writing

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however, provided for an annual increase of \$20 million in the Program Trigger beginning in 2016.

<sup>26</sup> TRIA § 103(e)(1)(A).

<sup>27</sup> TRIA § 103(e)(2)(A).

<sup>28</sup> TRIA requires the Secretary to notify Congress if insured losses are projected to exceed the Program Cap, and to determine the pro rata share of insured losses to be paid by each affected insurer. TRIA §§ 103(e)(2)-(3).

<sup>29</sup> TRIA §§ 103(e)(7)-(8).

policies in TRIP-eligible lines of insurance. Surcharges are placed on all TRIP-eligible insurance policies regardless of whether the policyholder purchased terrorism risk insurance.<sup>30</sup>

### **Small Insurer Definition**

The 2015 Reauthorization Act directed the Secretary to develop a regulatory definition of “small insurers” participating in TRIP for purposes of the biennial small insurer study.<sup>31</sup> Treasury regulation defines small insurers in direct relation to the Program Trigger:

*Small insurer* means an insurer (or an affiliated group of insurers . . .) whose policyholder surplus for the immediately preceding year . . . is less than five times the Program Trigger amount for the current year and whose direct earned premium for the preceding year is also less than five times the Program Trigger amount for the current year. An insurer that has not had a full year of operations during the immediately preceding calendar year is a small insurer if its policyholder surplus in the current year is less than five times the Program Trigger amount for the current year. A captive insurer is not a small insurer, regardless of the size of its policyholder surplus or direct earned premium.<sup>32</sup>

For the purposes of the 2019 TRIP data call, small insurers were insurers with both a 2017 policyholder surplus under \$800 million and 2017 TRIP-eligible DEP under \$800 million, each of which are equal to five times the 2018 Program Trigger of \$160 million.

### **Significance of the Program Trigger for Small Insurers**

The Program Trigger has no practical impact for insurers above the small insurer size threshold. This is because any “non-small” insurer that satisfies its own individual insurer deductible will also have sufficient losses to individually meet the Program Trigger. Under the Program, a non-small insurer will always be entitled to submit claims for the federal share of compensation once it meets its insurer deductible.

However, the Program Trigger can pose a barrier to recovery of the federal share of compensation by small insurers. A small insurer may satisfy its individual insurer deductible, but still have total losses that are beneath the Program Trigger. For example, if a small insurer had a 2018 insurer deductible of \$50 million, and experienced \$100 million in total insured

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<sup>30</sup> Depending on how any federal payments under TRIP compare with the total insured losses paid by participating insurers, TRIA provides that recoupment under the Program may be mandatory, or may be subject to the Secretary’s discretion. In connection with amounts subject to mandatory recoupment, Treasury must collect 140 percent of total amounts expended. See TRIA §§ 103(e)(7)-(8).

<sup>31</sup> TRIA § 108(h)(1). Treasury’s small insurer definition should not be viewed as having relevance to any other definition of “small insurer” that may be used in other statutory and regulatory determinations, either at the federal or state levels.

<sup>32</sup> 31 C.F.R. § 50.4(z).



losses due to a certified act of terrorism, the insurer would only be able to receive payment of the federal share of compensation if aggregate insured losses among all Program participants exceeded the Program Trigger (\$160 million in 2018). If this insurer was the only insurer to sustain insured losses in the act of terrorism (or if aggregate industry losses were under \$160 million), the Program Trigger would not be satisfied, and the insurer would not be able to submit a claim for the federal share of compensation, despite satisfying its individual insurer deductible.

## IV. DATA COLLECTION

### A. Data Collection Process

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>33</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 risk coverage offered;
- (5) the take-up rate for terrorism risk coverage;
- (6) the amount of private reinsurance for acts of terrorism purchased; and
- (7) such other matters as the Secretary considers appropriate.<sup>34</sup>

This Study is based primarily on the results of Treasury's 2017, 2018 and 2019 TRIP data calls. In addition, Treasury performed qualitative research and sought input from stakeholders, including small insurers, other Program participants, state insurance regulators, the National Association of Insurance Commissioners, and the general public, through a Federal Register Notice seeking comments.<sup>35</sup> When analyzing certain market changes over time for this Study, Treasury also considered information reported by insurers to state regulators.

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<sup>33</sup> TRIA § 104(h)(1).

<sup>34</sup> TRIA §§ 104(h)(1)(A)-(G).

<sup>35</sup> See Comments in Aid of Analyses of the Terrorism Risk Insurance Program, 84 Fed. Reg. 14725 (April 11, 2019), <https://www.govinfo.gov/content/pkg/FR-2019-04-11/pdf/2019-07216.pdf>. In response to its notice seeking comments in connection with the 2019 Small Insurer Study, Treasury received four substantive comments from the National Association of Mutual Insurance Companies (NAMIC Comments), the American Property Casualty Insurance Association (APCIA Comments), the National Council on Compensation Insurance (NCCI Comments), and Atlantic Charter Insurance Companies (Atlantic Charter Comments). All comments are available at <https://www.regulations.gov/docket?D=TREAS-TRIP-2019-0002>.

The 2017, 2018, and 2019 TRIP data calls were mandatory for participating insurers,<sup>36</sup> subject to an exception for small insurers with less than \$10 million in TRIP-eligible lines DEP in any individual reporting year.<sup>37</sup>

Treasury collected data on a group basis because TRIP is generally administered on a group basis.<sup>38</sup> Treasury collected data concerning DEP, policy exposures, policyholder take-up rates, and reinsurance.

Treasury collected data through a third-party insurance statistical aggregator, as required by the 2015 Reauthorization Act.<sup>39</sup> The statistical aggregator provided results to Treasury in an aggregated, anonymous format that did not identify any specific reporting groups or individual insurers. Treasury obtained most of the workers' compensation insurance data from the National Council on Compensation Insurance (which provided data from the states in which it operates as well as on behalf of other independent state workers' compensation rating bureaus), the California Workers' Compensation Insurance Rating Bureau, and the New York Compensation Insurance Rating Board, thereby reducing the burden of the reporting requirements on the insurance industry.

## **B. Responding Insurer Categories**

Insurer groups were required to report in one of four insurer categories, based on the requirements of TRIA and its implementing regulations.<sup>40</sup> These insurer categories included non-small and small domestic insurers that were "admitted" or licensed to write business in at least one U.S. jurisdiction,<sup>41</sup> domestic and foreign insurers that were permitted as a matter of

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<sup>36</sup> Insurers that are not small insurers were subject to different reporting templates that requested more data elements.

<sup>37</sup> Based on state reporting data, Treasury estimates that the approximately 400 insurers eligible for this reporting exception in the 2019 TRIP data call represented 0.5 percent of the TRIP-eligible lines premium market, and 3.7 percent of the small insurer market segment. These amounts are similar to Treasury's estimates for the 2017 and 2018 TRIP data calls. State reporting data cited in this Study are as of December 31, 2018, as derived from S&P Global Market Intelligence (S&P Global) on April 9, 2019.

<sup>38</sup> An "affiliate" under TRIP is "any entity that controls, is controlled by, or is under common control with the insurer." 31 C.F.R. § 50.4(c). Calculation of the deductible and the submission of claims under TRIP is on a group basis, in light of the "affiliate" definition in the regulations. Recoupment surcharges, however, are assessed and collected on an individual company basis. *See* 31 C.F.R. § 50.96. Insurer groups may include both domestic insurers as well as foreign insurers writing business in the United States on a surplus lines basis.

<sup>39</sup> TRIA § 104(h)(3). Insurance Services Office, Inc. was the data aggregator for the 2017, 2018, and 2019 TRIP data calls.

<sup>40</sup> Each insurer category was provided with a different reporting template that was tailored to that category.

<sup>41</sup> An admitted company is "an insurance company licensed to do business in a state(s), domiciled in an alternative state or country." "Glossary of Insurance Terms," National Association of Insurance Commissioners,

state law to write U.S. business on a surplus lines basis, and captive insurers admitted or licensed to write TRIP-eligible lines of insurance in at least one U.S. jurisdiction.<sup>42</sup>

For 2019, the four insurer categories required to report information were as follows:

- (1) **Small Insurers:** Domestic insurers or groups (including affiliated alien surplus lines insurers) with *both* 2017 DEP in TRIP-eligible lines of insurance of less than \$800 million *and* a 2017 policyholder surplus of less than \$800 million. The small insurer threshold is calculated annually in relation to the Program Trigger amount.<sup>43</sup>
- (2) **Non-Small Insurers:** Domestic insurers or groups (including affiliated alien surplus lines insurers) with either DEP in TRIP-eligible lines of insurance above the small insurer threshold or a policyholder surplus above the small insurer threshold.
- (3) **Captive Insurers:** Insurers formed to insure the risk exposures of their policyholder owners and regulated by the captive insurance laws of a particular state jurisdiction.<sup>44</sup> Captive insurers are explicitly excluded from the regulatory definition of small insurers, and therefore were not subject to this Study's analysis of small insurers.
- (4) **Alien Surplus Lines Insurers:** Alien surplus lines insurers not affiliated with either a domestic non-small or small insurer.<sup>45</sup> Alien surplus lines insurers were not subject to this Study's analysis of small insurers (unless affiliated with an admitted small insurer group).<sup>46</sup>

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[http://www.naic.org/consumer\\_glossary.htm](http://www.naic.org/consumer_glossary.htm).

<sup>42</sup> Non-admitted insurers can write insurance on a surplus lines basis when the desired coverage cannot be obtained from admitted insurers in the jurisdiction in question. See 31 C.F.R. § 50.4(o)(1)(i)(B). See also "Glossary of Insurance Terms."

<sup>43</sup> See FIO, *2017 Small Insurer Study*, 6-7, 21-23.

<sup>44</sup> See 31 C.F.R. § 50.4(g).

<sup>45</sup> Alien surplus lines insurers are non-U.S. insurers qualified by state regulators to participate in U.S. insurance markets on a surplus lines basis. They are allowed to write insurance for risks that cannot be placed with domestic licensed insurers in the admitted market. See 31 C.F.R. § 50.4(o)(1)(i)(B).

<sup>46</sup> Although most alien surplus lines insurers are below the "small insurer" size threshold, the coverages and policyholders in the surplus market may differ significantly from risks placed in the admitted market. In addition, although admitted small insurers may write insurance in the surplus market, only 9.8 percent of the individual insurers within the small insurer groups that reported in the 2019 TRIP data call identified as surplus lines insurers.

### **C. Response Rate**

Treasury estimates that the response rate for admitted insurers in the 2019 TRIP data call (measured by TRIP-eligible DEP) was at least 99.8 percent for non-small insurers, and at least 87.3 percent for small insurers.<sup>47</sup>

### **D. Data Quality Evaluation**

This Study analyzes data for CY 2009 through 2018. For CY 2016 through 2018, Treasury relied primarily on the results of the 2017, 2018, and 2019 TRIP data calls.<sup>48</sup> In addition, Treasury reviewed state reporting data to draw conclusions for the period from CY 2009 through 2015 (prior to Treasury's first mandatory data call).<sup>49</sup> Treasury also compared the results of its 2017, 2018, and 2019 TRIP data calls with state reporting data for the same period to further validate the accuracy of reported data.

The comparison between the TRIP data calls and state reporting data is relevant because TRIP-eligible lines are defined by regulation with general reference to state insurance reporting lines. State insurance regulators collect P&C insurance information from insurers licensed in their respective jurisdictions, and although the collection has not historically included information specific to the terrorism risk insurance component of P&C insurance policies, the information collected does identify DEP collected by lines of insurance.

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<sup>47</sup> The small insurer response rate could be higher because the non-responder category could include some small insurers that were not subject to the data call. Determining the response rate for alien surplus lines and captive insurers under TRIP is more difficult because those insurers typically do not submit publicly available information that Treasury can use to independently evaluate response rates. Based upon prior evaluations and coordination with relevant state insurance regulators, Treasury estimates that the significant majority of alien surplus lines and captive insurers participating in the Program responded to the 2019 TRIP data call.

<sup>48</sup> Some of the figures reported in this Study relating to the 2017 and 2018 TRIP data calls may not be identical to similar information previously reported by Treasury because of late-reported or corrected data that was submitted after prior report publication.

<sup>49</sup> Treasury performed its first data collection in 2016. However, because it was the first year of data collection under the 2015 Reauthorization Act, Treasury made participation in the collection voluntary to reduce the imposition of undue burdens on insurers. See Request for Data and Information, 81 Fed. Reg. 11649 (March 4, 2016), <https://www.govinfo.gov/content/pkg/FR-2016-03-04/pdf/2016-04821.pdf>. Insurers representing approximately 41 percent of the entire terrorism risk insurance market (by DEP) responded to the 2016 voluntary data call. Because of the limited response to the 2016 TRIP data call, the Study does not compare results from the 2016 voluntary data call to the 2017, 2018 and 2019 mandatory data calls. For more information about the voluntary 2016 TRIP data call, see Federal Insurance Office, U.S. Department of the Treasury, *Report on the Overall Effectiveness of the Terrorism Risk Insurance Program* (2016), 7, [https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/2016\\_TRIP\\_Effectiveness\\_%20Report\\_FINAL.pdf](https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/2016_TRIP_Effectiveness_%20Report_FINAL.pdf).



The Program uses the existing state-defined insurance lines and reporting data standards to determine the insurance that is subject to the Program, which promotes efficient Program administration. It also enables Treasury to determine whether the data reported by non-small insurers and small insurers under TRIP data calls is generally consistent with similar data reported for state regulatory purposes.

The use of the state reporting data in this Study permits analysis of the entire period from 2009 to 2018.<sup>50</sup> However, the nature of the state reporting data results in some variations between the state data and the TRIP data collected by Treasury. There are some differences between the TRIP-eligible lines of insurance and the same lines when used for state reporting purposes. This difference is caused by state reporting lines including certain premium that is not subject to the Program.<sup>51</sup> Treasury has adjusted the state data to account for the premium differential between the TRIP-eligible lines of insurance and the state reporting lines from 2009 to 2018 by assuming that similar amounts of premium in the state reporting lines were not subject to the Program but still reported for state purposes. In addition, the state reporting data used in this analysis relates to the TRIP-eligible lines and is not specific to terrorism risk. For purposes of this analysis, Treasury considers the data, as adjusted, to be instructive and generally consistent with the information generated by the TRIP data calls.

The relationship between the small insurer definition and the Program Trigger also affects the analysis of market changes from 2009 to 2018. The Program Trigger increased in 2016, 2017, and 2018, which affected the number of insurers defined as small insurers in each of these years.<sup>52</sup> Specifically, the number of insurers classified as small insurers increased because a greater number of insurers were below both the small insurer DEP threshold and the policyholder surplus threshold. This change in the Program Trigger results in an increase in the market share of small insurers, assuming all other considerations remain the same. Treasury discussed this issue in its 2017 Small Insurer Study.<sup>53</sup>

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<sup>50</sup> All reported state data includes data for the District of Columbia in addition to the 50 U.S. states.

<sup>51</sup> The principal differences between state reporting lines and TRIP-eligible lines are: (1) certain lines of insurance (principally Fire and Allied Lines, but also other lines) encompass policies written to cover personal, and not commercial, exposures, which are not subject to TRIP; and (2) Professional Liability insurance is not subject to TRIP, even though it is reported for state purposes under the Other Liability line of insurance, which is otherwise a TRIP-eligible line of insurance. *See* 31 C.F.R. § 50.4(w).

<sup>52</sup> The annual Program Trigger adjustment is described above in note 25.

<sup>53</sup> *See* FIO, *2017 Small Insurer Study*, 11-12.

## V. STUDY OF SMALL INSURER COMPETITIVENESS IN THE TERRORISM RISK INSURANCE MARKETPLACE

As noted above, TRIA requires each small insurer study to include an analysis of the following six areas:

- A. Changes to market share, premium volume, and policyholder surplus of small insurers relative to large insurers;
- B. How the P&C insurance market for terrorism risk differs between small and large insurers and whether such a difference exists within other perils;
- C. The impact of the Program's mandatory availability requirement on small insurers;
- D. The effect on small insurers of increasing the Program Trigger;
- E. The availability and cost of private reinsurance for small insurers; and
- F. The impact that state workers' compensation laws have on small insurers and workers' compensation carriers in the terrorism risk insurance marketplace.

This Study analyzes each of these areas.

### A. Analysis of Changes to Market Share, Premium Volume, and Policyholder Surplus

Figure 1 sets forth summary information from the 2017, 2018, and 2019 TRIP data calls concerning the insurer categories participating in TRIP, as indicated by reported TRIP-eligible DEP.

**Figure 1: TRIP-Eligible DEP by Insurer Category**<sup>54</sup>

	2017 TRIP Data Call		2018 TRIP Data Call		2019 TRIP Data Call	
	2016 DEP in TRIP-Eligible Lines	% of Total	2017 DEP in TRIP-Eligible Lines	% of Total	2018 DEP in TRIP-Eligible Lines	% of Total
Alien Surplus Lines Ins.	\$ 7,421,060,583	4%	\$ 9,492,933,571	5%	\$ 7,618,548,358	4%
Captive Insurers	7,930,646,027	4%	9,052,630,571	4%	8,937,119,082	4%
Non-Small Insurers	168,238,219,882	83%	163,891,791,592	80%	166,188,192,378	81%
Small Insurers	20,085,947,637	10%	21,806,195,201	11%	22,516,178,612	11%
<b>Total</b>	<b>\$ 203,675,874,129</b>	<b>100%</b>	<b>\$ 204,243,550,936</b>	<b>100%</b>	<b>\$ 205,260,038,430</b>	<b>100%</b>

Source: 2017-2019 TRIP Data Calls

Treasury concluded in its 2018 Effectiveness Report that the market for terrorism risk insurance in the United States was relatively stable; that insurance was both available and affordable to

<sup>54</sup> Some figures may not add to 100 percent due to rounding.

U.S. policyholders; and that the Program has been effective in promoting this market stability.<sup>55</sup> Although not the focus of this Study, Treasury's analysis of the 2019 TRIP data call is consistent with Treasury's findings in the 2018 Effectiveness Report. Treasury will continue to evaluate the market in its effectiveness report to be issued in June 2020. Within the terrorism risk insurance market, small insurers represented approximately 11 percent of the entire TRIP-eligible lines insurance market between 2016 and 2018. However, the increase in the Program Trigger during this period brought more insurers within the small insurer category, so these market share figures may not be based upon the same population of insurers.

This part of the Study examines changes to the market share, premium volume, and policyholder surplus of small insurers as compared to large (or non-small) insurers between 2009 and 2018. This analysis does not include the market shares of alien surplus lines insurers and captive insurers, given the lack of comparable data. Therefore, the current overall market share of small insurers when measured only against non-small insurers is slightly higher than the 11 percent figure noted above for the market as a whole.

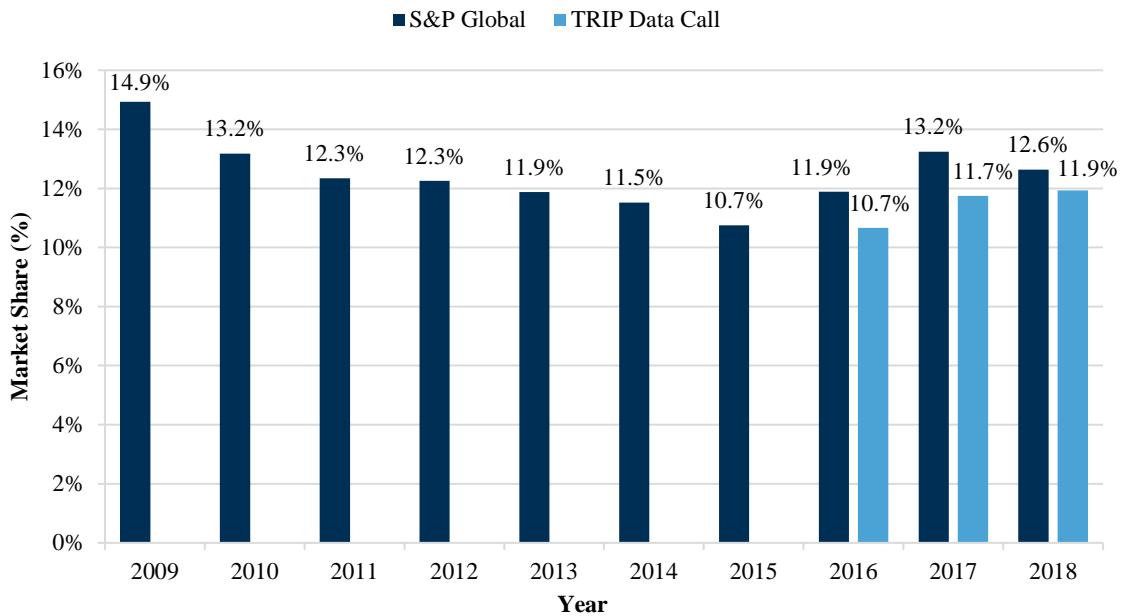
Treasury performed multiple analyses to evaluate the changes discussed in this section. First, Treasury examined the market share of small insurers, using the regulatory definition of small insurer that directly relates to the Program Trigger. Although the small insurer definition was not adopted until 2016, Treasury analyzed 2009-2018 data based on the number of insurers that would have been considered small insurers under the Program if the small insurer definition had been in effect since 2009.<sup>56</sup> Figure 2 uses the state reporting data for the entire 2009-2018 period, as well as the more specific results from Treasury's 2016-2018 TRIP data calls, arrayed next to the corresponding years of state data from those years.

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<sup>55</sup> Federal Insurance Office, U.S. Department of Treasury, *Report on the Overall Effectiveness of the Terrorism Risk Insurance Program* (2018), 16, [https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/2018\\_TRIP\\_Effectiveness\\_Report.pdf](https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/2018_TRIP_Effectiveness_Report.pdf).

<sup>56</sup> Thus, Treasury's analysis assumes that small insurers in 2014 and before had less than \$500 million in DEP and policyholder surplus, because the Program Trigger was \$100 million in those years.

**Figure 2: 2009-2018 Market Share by DEP of Small Insurers in TRIP-Eligible Lines based upon Application of Small Insurer Definition in Each Year**

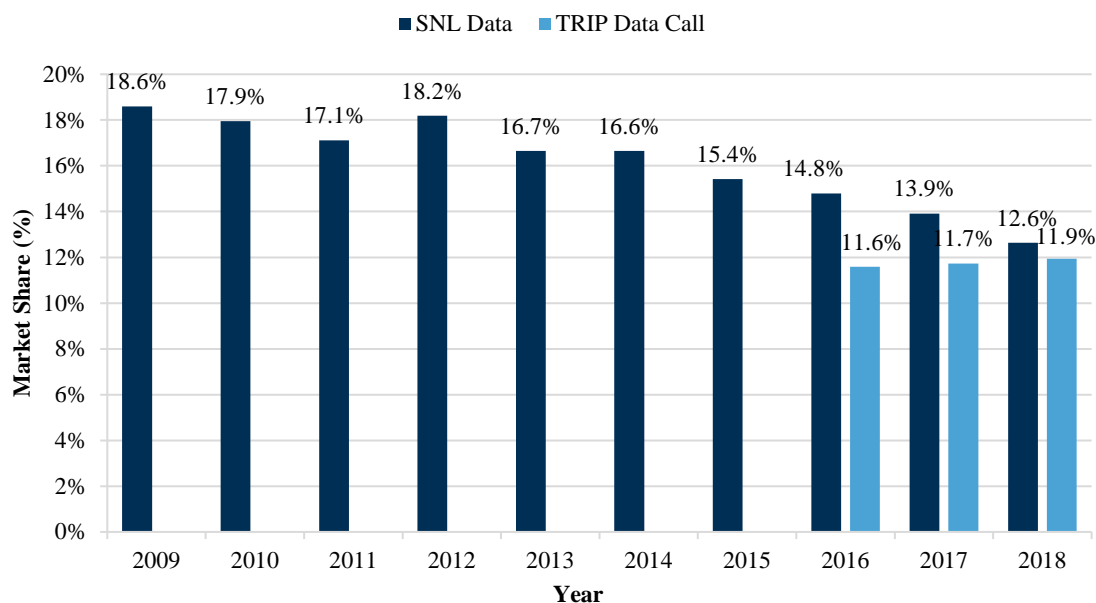


Source: S&P Global and 2017-2019 TRIP Data Calls

Figure 2 reflects some fluctuation in market shares of small insurers based, in part, upon the change in the number of small insurers in the market during each year on account of application of Treasury’s small insurer definition and changes in the Program Trigger. During the 2016-2018 period, the increase in the Program Trigger brought more insurers within the small insurer category.

Second, in order to account for the impact the change in the Program Trigger has on the number of insurers, Treasury applied a fixed small insurer threshold between the years of 2009 and 2018. This was done by identifying all insurers meeting the 2018 definition of small insurer – that is, all insurers with less than \$800 million in TRIP-eligible lines premium and policyholder surplus. Using this approach, Figure 3 shows the same market share analysis from 2009 to 2018, again using both the state reporting data as well as data from the TRIP data calls.

**Figure 3: 2009-2018 Market Share by DEP of Small Insurers in TRIP-Eligible Lines based upon 2018 Application of Small Insurer Definition**



Source: S&P Global and 2017-2019 TRIP Data Calls

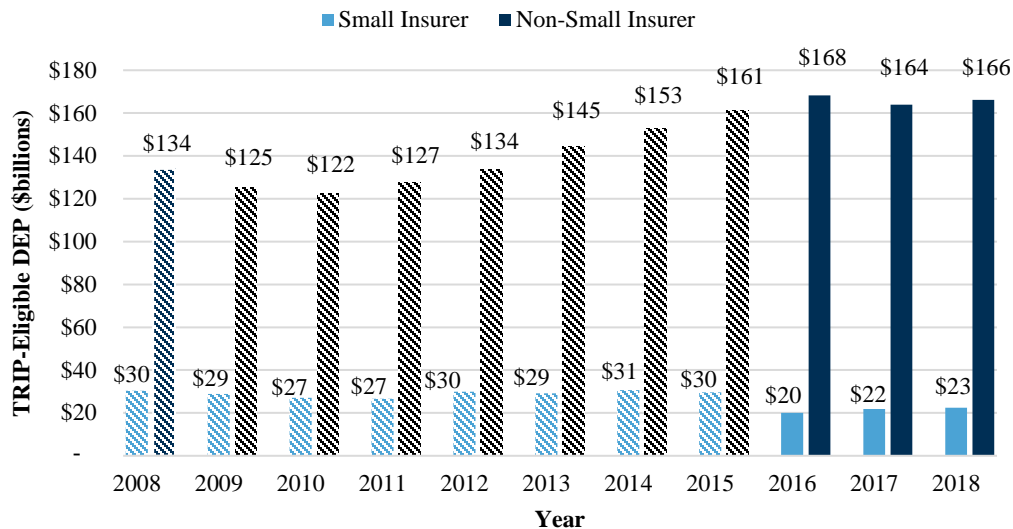
After accounting for the change in the small insurer threshold, Figure 3 generally shows a decrease in small insurer market share, particularly from 2012 through 2018 (although the trend is flat for the 2016-2018 period if only the TRIP data call information is considered).<sup>57</sup>

Figure 4 compares the premium volume for TRIP-eligible lines for small insurers and non-small insurers from 2009 to 2018. It uses the 2018 small insurer threshold to evaluate the experience of small and non-small insurers over time, and uses state data for the 2009 to 2015 period, and the TRIP data call information for the 2016 to 2018 period.

<sup>57</sup> In its analysis for the 2017 Small Insurer Study, Treasury also observed a small decline in the TRIP-eligible lines market share of small insurers between 2006 and 2016. See FIO, *2017 Small Insurer Study*, 12.



**Figure 4: 2009-2018 Premium Volume Comparison for TRIP-Eligible Lines  
Small Insurers vs. Non-Small Insurers**



Source: S&P Global (2009-2015) and 2017-2019 TRIP Data Calls (2016-2018)

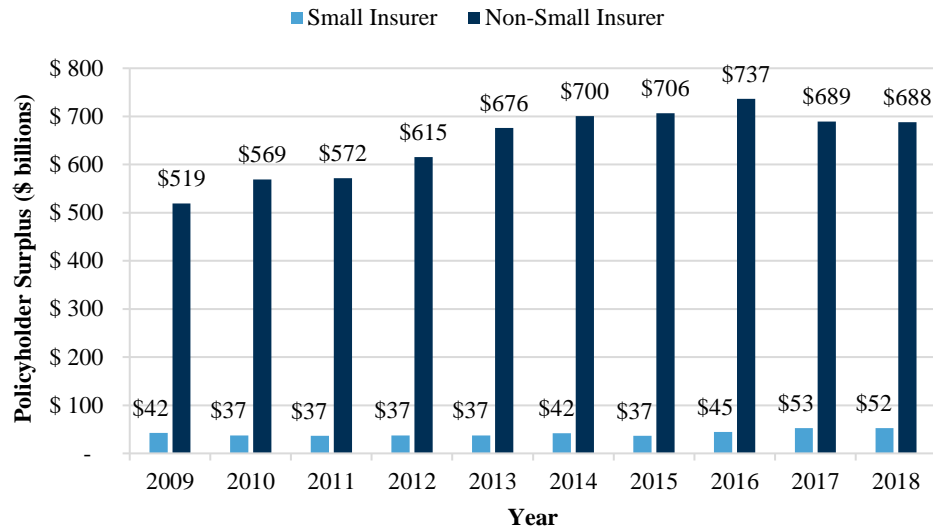
As shown in Figure 4, small insurer DEP has remained relatively constant from 2009 to 2018.<sup>58</sup> In comparison, the premium of non-small insurers increased during this period, which has resulted in the gradual market share decline for small insurers.

Figure 5 compares policyholder surplus for small insurers and non-small insurers between 2009 and 2018, again applying the 2018 small insurer threshold for each year. Policyholder surplus is an indicator of an insurer's financial health, and its ability to pay claims and write new business.<sup>59</sup>

<sup>58</sup> After accounting for the change in the data used beginning in 2016, where TRIP data call information is used instead of adjusted state data.

<sup>59</sup> Policyholder surplus is the measurement of an insurer's "assets in excess of the liabilities of a company or net income above any monies indebted to legal obligation." "Glossary of Insurance Terms." The policyholder surplus of a P&C insurer is not limited to supporting its terrorism insurance exposure; rather, it "backs all property and casualty insurance policies in the United States and is subject to depletion in a wide variety of events. For example, extreme weather losses could particularly draw capital away from the terrorism insurance market, because events such as hurricanes share some characteristics – low frequency and the possibility of catastrophic levels of loss – with terrorism risk." Congressional Research Service, *Terrorism Risk Insurance: Overview and Issue Analysis for the 116th Congress* (2019), 11, <https://crsreports.congress.gov/product/pdf/R/R45707>.

**Figure 5: 2009-2018 Policyholder Surplus Comparison  
Small Insurers vs. Non-Small Insurers**



Source: S&P Global

Between 2009 and 2018, the aggregate policyholder surplus for all small insurers ranged from \$53 billion in 2017 to \$37 billion from 2010 to 2013, and in 2015. The policyholder surplus of non-small insurers generally increased from 2009 through 2016, although it has declined since the high figure recorded in 2016.

In the absence of terrorism risk insurance-specific data from 2009 to 2015, this Study’s use of the state-reported TRIP-eligible lines data for the 2009 to 2015 period is only a proxy for market share information during this period. Based upon this information, however, the market share of small insurers (measured by TRIP-eligible lines premium, and adjusting for the small insurer size threshold over time) experienced a decline relative to the market share of non-small insurers between 2009 and 2018. During this timeframe, the small insurer DEP remained relatively constant, while the DEP of non-small insurers increased. Similarly, policyholder surplus for small insurers also remained relatively constant, and the policyholder surplus of non-small insurers increased (except for the noted decline over the past two years).

## **B. Market Differences between Small Insurers and Large Insurers in the Terrorism Risk Insurance Marketplace and Comparison to Other Perils**

Based upon information collected through Treasury’s TRIP data calls, this section analyzes premiums, take-up rates, geographic scope of writings, and the lines of insurance in which small insurers are more heavily concentrated and comprise a larger share of the overall market.

Terrorism risk coverage provided under TRIP is generally “embedded” in policies that also cover other risks. Approximately 80 percent of the U.S. terrorism risk insurance market (as measured by terrorism risk insurance DEP) is comprised of embedded policies.

The remaining 20 percent of the U.S. terrorism risk insurance market is comprised of policies provided on a “standalone” basis, where the policy provides coverage only for terrorism risk. This section separately examines coverage provided on a standalone basis, as well as the additional specialized areas of cyber terrorism, and terrorism risk insurance for NBCR terrorism events.

### **1. Embedded Policies**

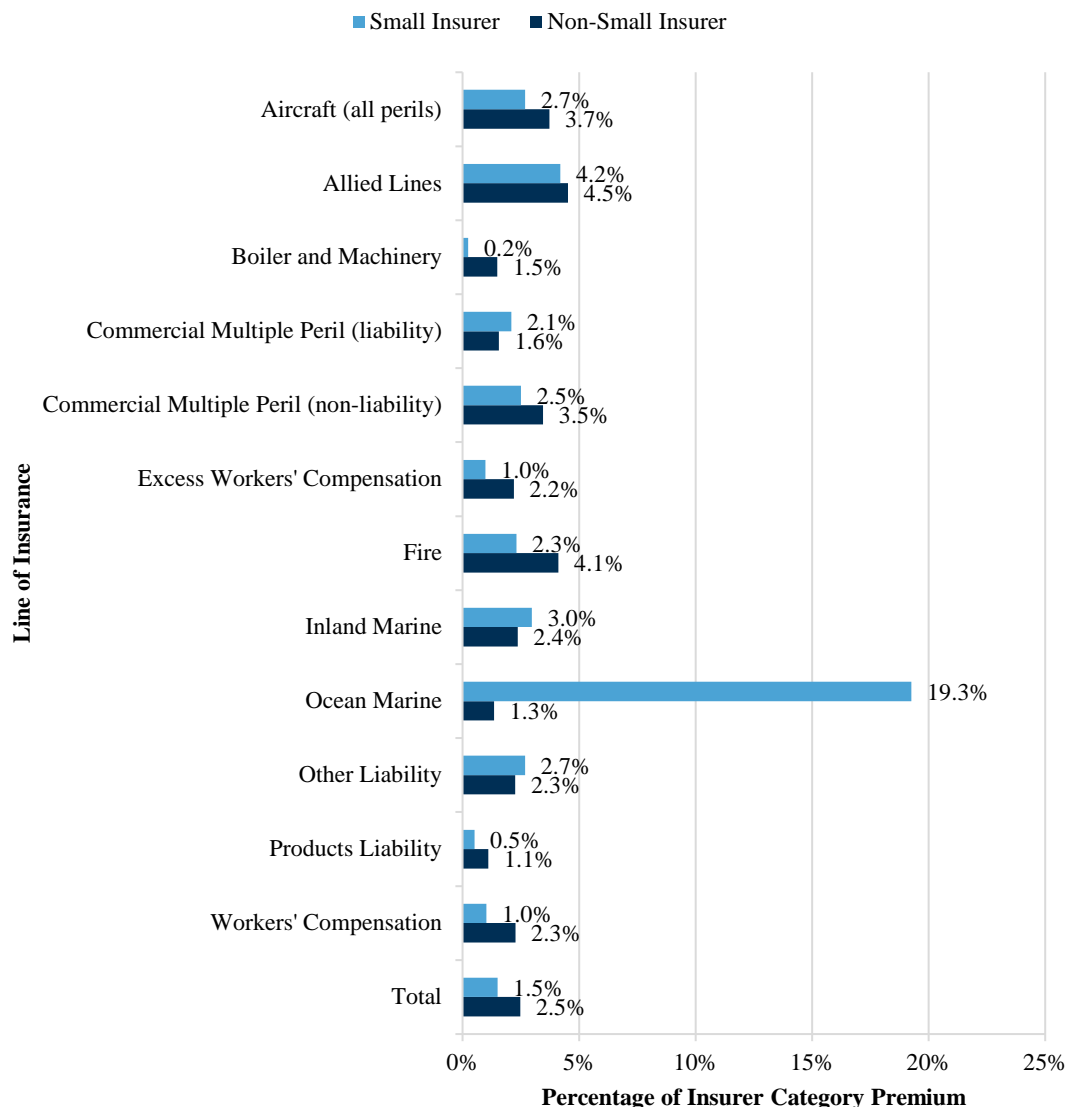
Embedded terrorism risk insurance is provided within P&C policies that also cover other risks. Under the Program, insurers must disclose to policyholders the amount of premium charged for embedded terrorism risk insurance.<sup>60</sup> The premium can be expressed to the policyholder as a percentage of the total premium charged for the policy. Similarly, analyses of terrorism risk insurance also typically express the cost of terrorism risk insurance as a percentage of total premiums charged. In many cases, terrorism risk insurance is provided at a disclosed premium of \$0, meaning it is provided by insurers at no additional charge.

Figure 6 compares the percentage of total policy DEP allocated to terrorism risk by small insurers and non-small insurers on a line-by-line basis. This Figure does not include commercial P&C policies where the insurer did not charge for terrorism risk coverage.

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<sup>60</sup> See 31 C.F.R. §§ 50.10, 50.12.

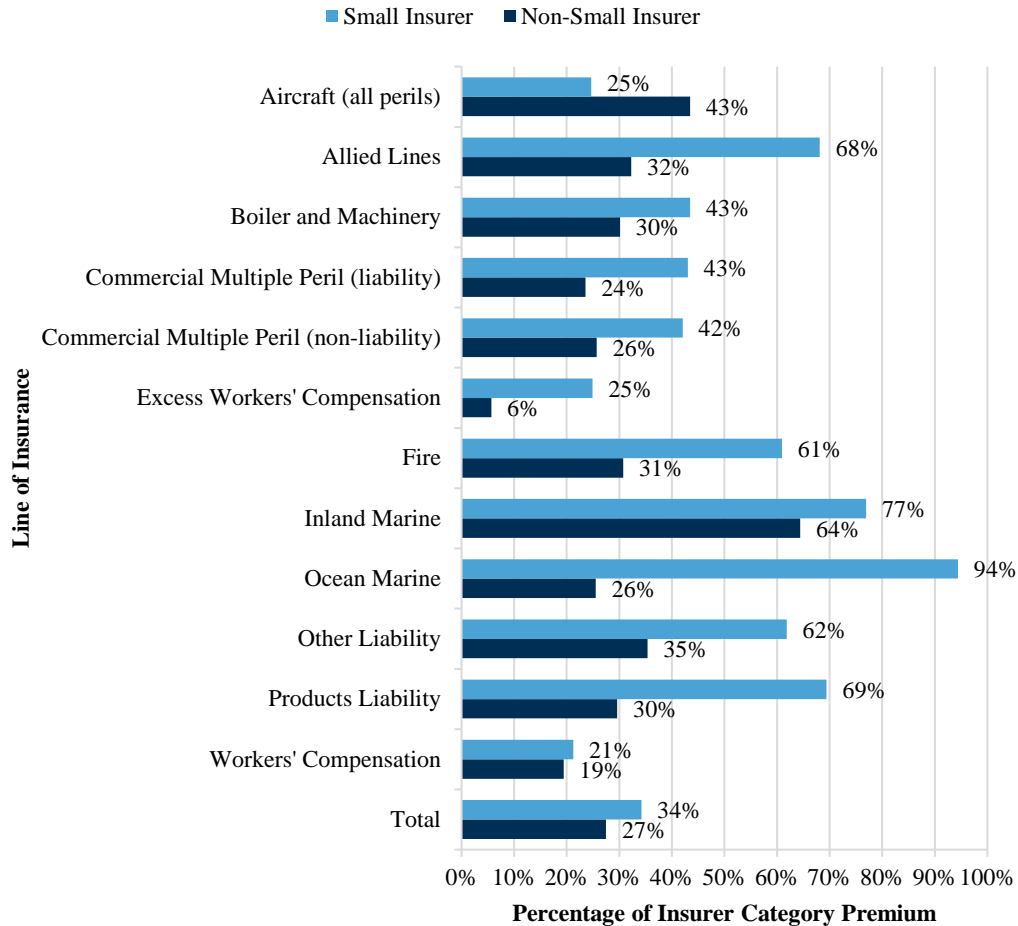
**Figure 6: 2018 Percentage of Total Policy DEP Allocated to Terrorism Risk  
(By Line of Insurance and Insurer Category)**



Source: 2019 TRIP Data Call

Figure 7 identifies where the coverage was provided for no additional charge, measured by percentage of total policy DEP where terrorism risk insurance is provided.

**Figure 7: 2018 Percentage of DEP Where Policies Include Terrorism Coverage At No Additional Cost (By Line of Insurance and Insurer Category)**



Source: 2019 TRIP Data Call

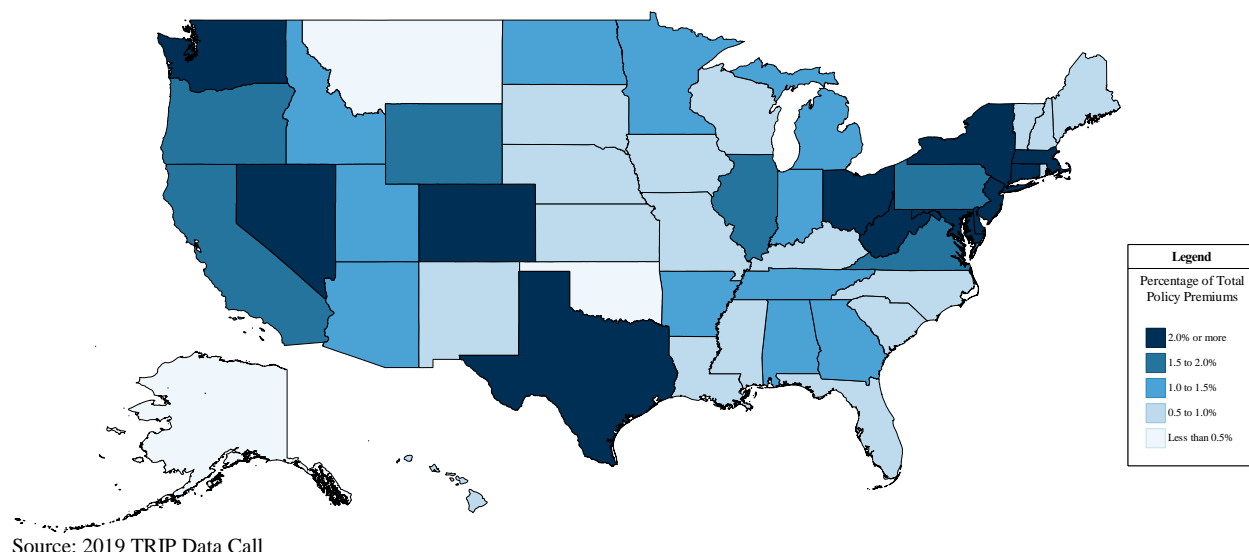
Figures 6 and 7 illustrate that small insurers generally charge proportionally less premium for terrorism risk insurance than do non-small insurers. When insurers charge a premium for terrorism risk insurance, the percentage of the total policy premium relating to terrorism risk for small insurers is smaller than the percentage charged by large insurers. This applies for most individual lines, as well as the overall market. In addition, small insurers are more likely than non-small insurers to charge no premium for terrorism risk insurance.

The amounts that insurers charge for terrorism risk coverage vary not only by line of insurance but also by geographic area. Figures 8 and 9 present maps illustrating the percentage of total premiums charged for terrorism risk by small insurers (Figure 8) and non-small insurers (Figure

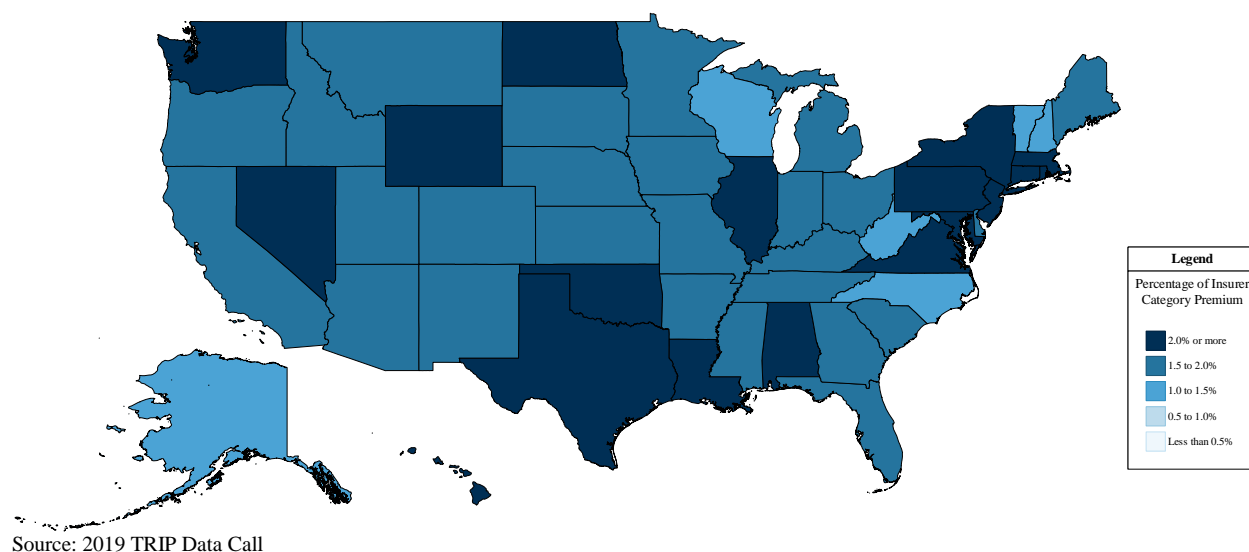


9) in each of the 50 states and the District of Columbia. The percentages in Figures 8 and 9 only account for policies in which a charge was made, and do not include those policies in which no charge was made.

**Figure 8: 2018 Percentage of Total Policy DEP Allocated to Terrorism Risk By Small Insurers (By State)**



**Figure 9: 2018 Percentage of Total Policy DEP Allocated to Terrorism Risk By Non-Small Insurers (By State)**

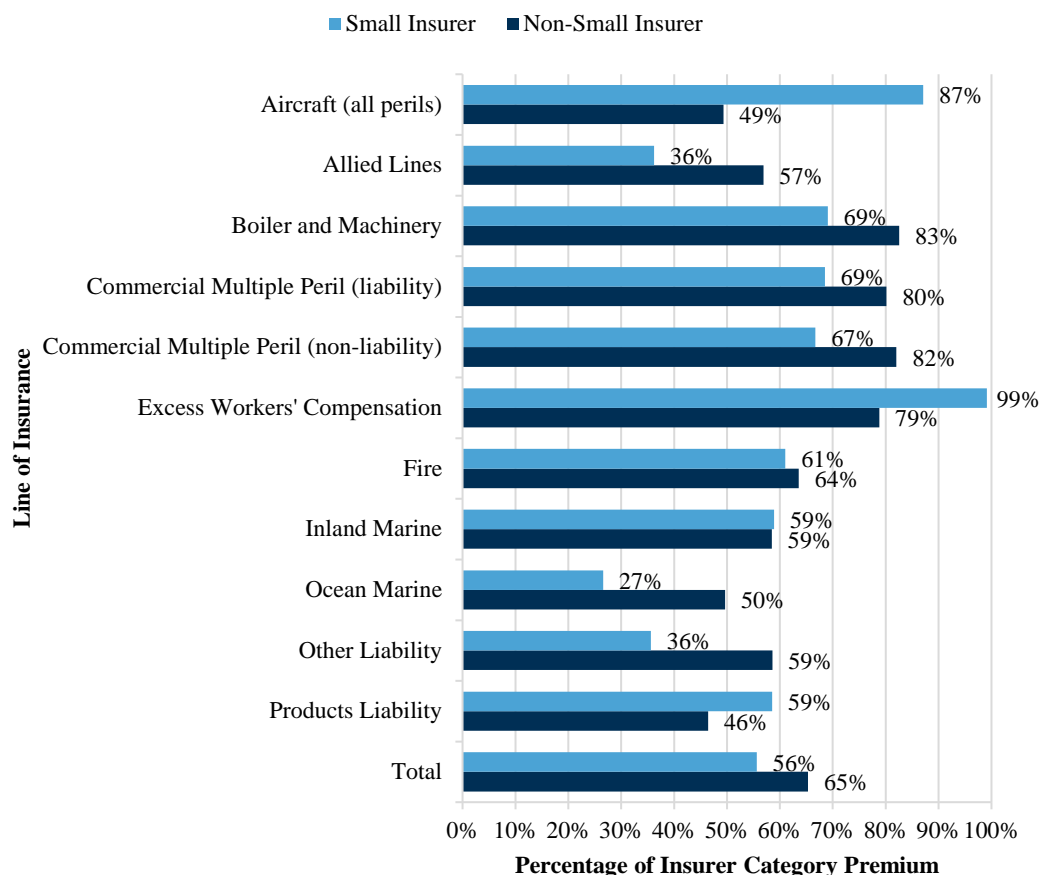


Figures 8 and 9 show that the same trends in the amount of premium charged are observed when evaluating the data on a state-by-state basis. The lighter shading in Figure 8 as compared to Figure 9 illustrates that small insurers charge less than non-small insurers in most states.

However, when evaluating what an insurer charges for terrorism risk insurance, it should be noted that the available data does not provide any information concerning the nature of the particular risks being insured by a given policy or insurer, which will affect the premium being charged.

Figure 10 compares the take-up rates for terrorism risk insurance of small insurers and non-small insurers on a line-by-line basis.

**Figure 10: 2018 Terrorism Risk Insurance Take-Up Rates  
(By Line of Insurance and Insurer Category)<sup>61</sup>**



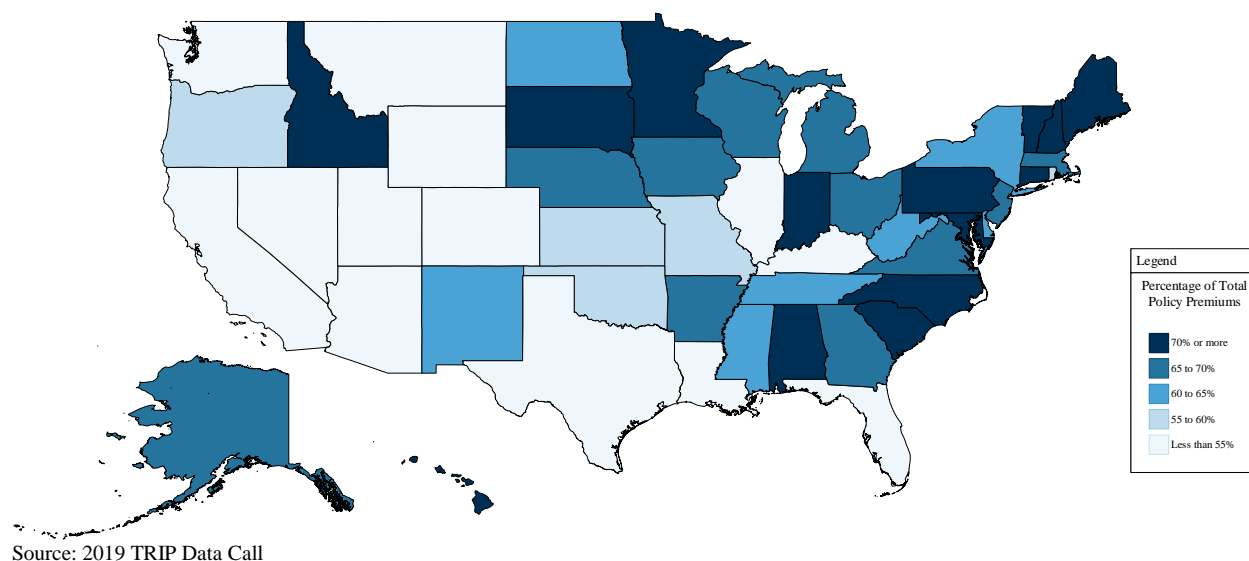
Source: 2019 TRIP Data Call

When measured by DEP, policyholder take-up rates for policies written by small insurers were generally lower than those of non-small insurers, both within most individual lines and across the overall market.

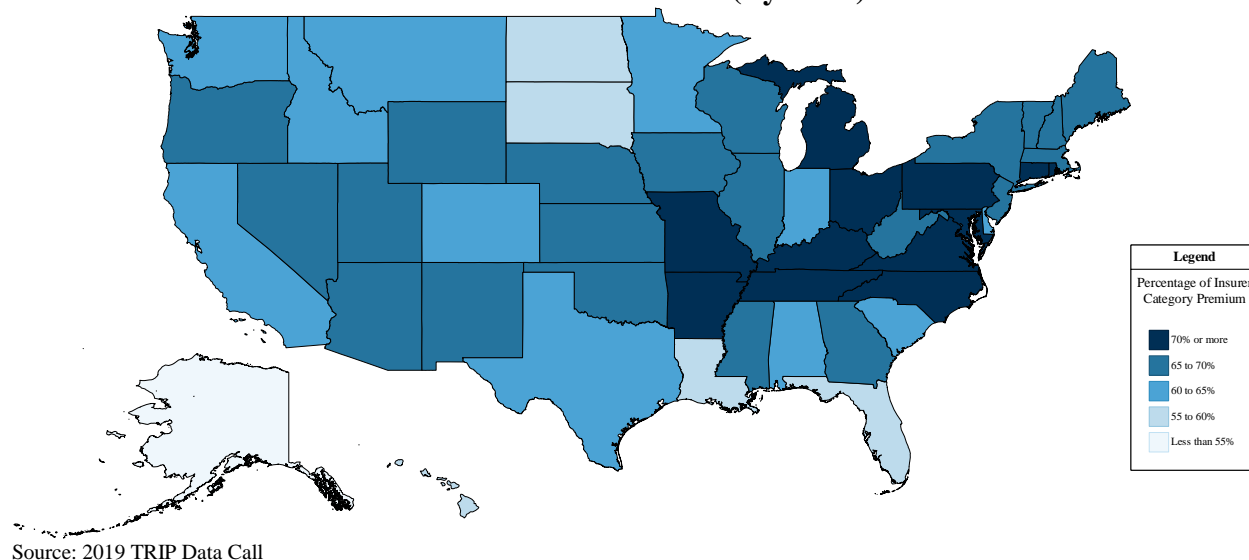
<sup>61</sup> As a matter of state law, primary workers' compensation policies must provide coverage for terrorism risk, and thus the effective take-up rate for this line is 100 percent. By contrast, excess workers' compensation insurance is purchased by companies that otherwise self-insure for workers' compensation liability. The excess policy will provide coverage in excess of the obligations to the policyholder as defined in the policy. Because state law permits excess workers' compensation insurance to exclude or limit certain risks, the take-up rate for terrorism risk insurance under excess workers' compensation insurance is less than 100 percent (although the self-insured policyholder will remain liable for any excluded exposure). *See also* Section V.F (discussing workers' compensation insurance).

Figures 11 and 12 illustrate take-up rates on a state-by-state basis. These figures include policyholder take-up rates for all lines except workers' compensation.<sup>62</sup>

**Figure 11: 2018 Terrorism Risk Insurance Take-Up Rates for Small Insurers (By State)**



**Figure 12: 2018 Terrorism Risk Insurance Take-Up Rates for Non-Small Insurers (By State)**

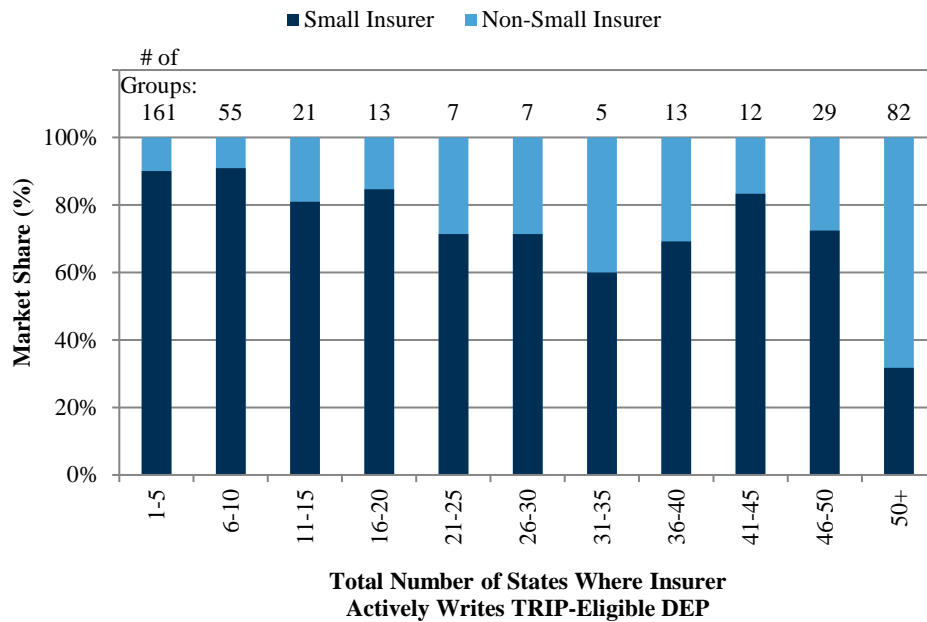


<sup>62</sup> Workers' compensation is not included because policyholders must obtain terrorism risk insurance under such policies and the take up rate is thus effectively 100 percent. Excess workers' compensation is included, however, because policyholders can decline terrorism risk insurance in connection with such insurance. See note 61, above.

Appendix 1 to this Study contains a table setting forth the specific 2018 take-up rates presented in Figures 11 and 12 by state for both small and non-small insurers. Appendix 2 to this Study provides more detailed take-up information for small and non-small insurers, by state and by groups of TRIP-eligible lines of insurance. The Appendices provide further detail on how take-up may vary by state, type of insurance, and small versus non-small insurers.

Figure 13 compares the geographic footprints of small insurers and non-small insurers by examining the number of states in which each insurer writes coverage, as measured by DEP.

**Figure 13: 2018 Geographic Scope of DEP (By Insurer Category)**



Source: S&P Global

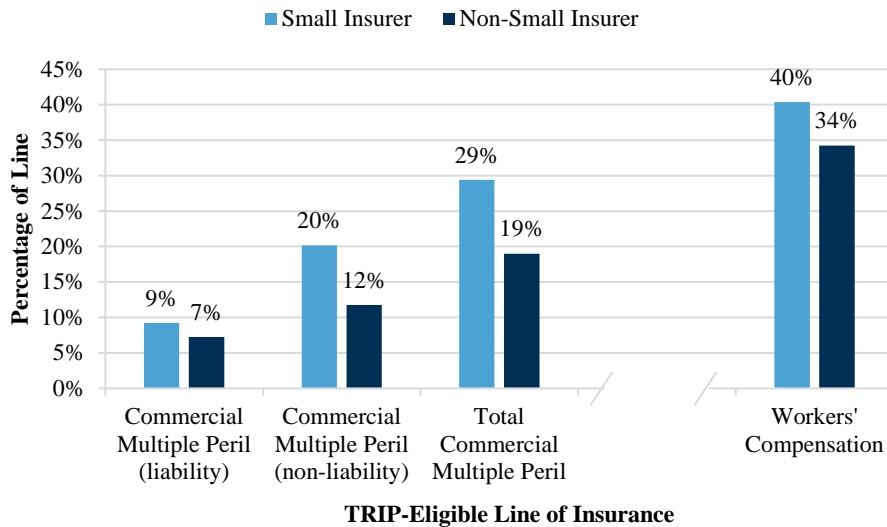
Figure 13 demonstrates that small insurers typically insure risks within a smaller geographic footprint than larger insurers. Small insurers tend to operate on a regional basis in a smaller number of states than do non-small insurers, which may result in small insurers having a significant presence in individual local markets.<sup>63</sup>

Figure 14 compares the DEP written by small insurers and non-small insurers in selected lines of insurance. Specifically, this Figure examines TRIP-eligible lines DEP written within the CMP

<sup>63</sup> As noted by one commenter, “many of these smaller regional carriers play an important role in ensuring there is available coverage across lines of insurance. If they were forced to exit a market because of their terrorism exposure this means they would also no longer be offering the other coverages in other lines as well.” NAMIC Comments, 2.

and workers' compensation lines. CMP products provide coverage for multiple lines of insurance within a single policy, and tend to be marketed towards small- to medium-sized businesses.<sup>64</sup> Workers' compensation insurance, which is discussed in greater detail in Section V.F. below, provides insurance for workplace injury benefits available under state workers' compensation systems.

**Figure 14: 2018 Percentage of DEP in the CMP and Workers' Compensation Lines (By Insurer Category)**



Source: 2019 TRIP Data Call

Figure 14 shows that the TRIP-eligible DEP of small insurers is more heavily concentrated in the CMP and workers' compensation lines of insurance than is the case for non-small insurers. As a result, such small insurers have a larger share of the CMP and workers' compensation lines of insurance than they have of other TRIP-eligible lines.

## 2. Standalone Terrorism Policies

Data collected during the 2019 TRIP data call reflects other differences between small insurers and other insurers participating in TRIP with regard to certain types of terrorism risk insurance. Standalone policies provide coverage only for terrorism risk, and they are generally used when properties or operations present heightened exposure to terrorism risk. Standalone terrorism coverage can be provided either through "certified" standalone terrorism risk policies, which are

<sup>64</sup> See generally "Understanding Business Owners Policies (BOPs)," Insurance Information Institute, <http://www.iii.org/article/understanding-business-owners-policies-bops>.

written subject to the terms and conditions of TRIP, or through “non-certified” standalone terrorism policies, which do not meet the terms and conditions of TRIP. Non-certified standalone terrorism policies therefore cover terrorism-related losses (as defined in the specific policy) regardless of whether the Secretary has certified an act of terrorism under TRIA.<sup>65</sup>

Figure 15 illustrates that small insurers issue a very limited number of standalone terrorism risk insurance policies.

**Figure 15: 2018 Certified Standalone Policies versus Non-Certified Standalone Policies (By Policy Count and DEP)**

	Certified Standalone Policies			Non-Certified Standalone Policies		
	# of Policies	Total DEP	Average Policy Cost	# of Policies	Total DEP	Average Policy Cost
Alien Surplus Lines Insurers	1,963	\$132,429,337	\$ 67,463	5,201	\$93,081,756	\$ 17,897
Captive Insurers	345	477,665,747	1,384,538	6	36,708,352	6,118,059
Non-Small Insurers	1,508	40,374,452	26,774	3,382	93,641,098	27,688
Small Insurers	4	6,519	1,630	18	103,490	5,749
<b>Total</b>	<b>3,820</b>	<b>\$650,476,055</b>	<b>\$1,480,404</b>	<b>8,607</b>	<b>\$223,534,696</b>	<b>\$6,169,393</b>

Source: 2019 TRIP Data Call

### 3. Cyber Risk

Cyber insurance is insurance for risks arising “from the use of electronic data and its transmission, including technology tools such as the internet and telecommunications networks,” as well as “physical damage that can be caused by cyber attack, fraud committed by misuse of data, any liability arising from data storage, and the availability, integrity and confidentiality of electronic information.”<sup>66</sup>

Depending on the circumstances, malicious cyber activity could constitute an act of terrorism under TRIA. As a result, to the extent cyber insurance is written under an embedded or standalone policy that is within the TRIP-eligible lines of insurance, the provisions of TRIA apply to such policies.<sup>67</sup>

Figure 16 shows the market participation for cyber policies within TRIP-eligible lines.

<sup>65</sup> “Non-certified standalone terrorism” policies, in addition to insuring losses for an “act of terrorism” definition that can be broader than the TRIA definition, can also be used to cover international locations outside the scope of TRIP, or provide coverage that may not be available on an embedded basis under other policies. See Neil Silverblatt, “7 Reasons to Consider a Stand-Alone Policy,” *PropertyCasualty360*, January 31, 2017, <https://www.propertycasualty360.com/2017/01/31/7-reasons-to-consider-a-stand-alone-terrorism-poli>.

<sup>66</sup> FIO, *2018 Effectiveness Report*, 53, note 110.

<sup>67</sup> See Guidance Concerning Stand-Alone Cyber Liability Insurance Policies Under the Terrorism Risk Insurance Program, 81 Fed. Reg. 95312 (December 27, 2016), <https://www.govinfo.gov/content/pkg/FR-2016-12-27/pdf/2016-31244.pdf>.



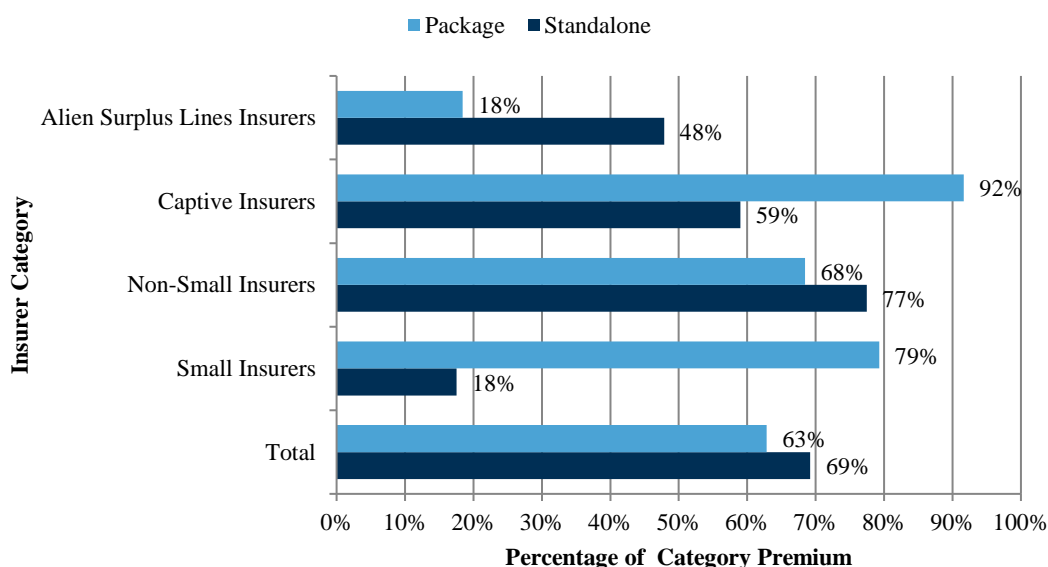
**Figure 16: 2018 TRIP-Eligible DEP for Cyber Policies**

	Standalone Cyber Policies		Package Cyber Policies		All Cyber Policies	
	Cyber DEP	% of Total TRIP-Eligible DEP	Cyber DEP	% of Total TRIP-Eligible DEP	Cyber DEP	% of Total TRIP-Eligible DEP
Alien Surplus Lines Insurers	\$ 271,043,782	23.0%	\$ 229,050,798	16.6%	\$ 500,094,778	19.6%
Captive Insurers	31,859,621	2.7%	81,523,378	5.9%	113,295,633	4.4%
Non-Small Insurers	854,606,675	72.6%	955,050,926	69.2%	1,808,746,723	70.8%
Small Insurers	19,866,915	1.7%	114,186,636	8.3%	134,053,551	5.2%
<b>Total</b>	<b>\$1,177,376,993</b>	<b>100%</b>	<b>\$1,379,811,738</b>	<b>100%</b>	<b>\$2,556,190,685</b>	<b>100%</b>

Source: 2019 TRIP Data Call

Figure 16 indicates that small insurers participate in the market for cyber insurance in the TRIP-eligible lines of insurance, although their market share is somewhat less than it is in the TRIP-eligible lines of insurance overall. The 2018 TRIP data call indicated very similar participation percentages for 2017.<sup>68</sup>

Figure 17 shows the 2018 industry percentages for policyholders that obtained terrorism risk insurance in connection with purchased cyber coverage.

**Figure 17: 2018 Take-Up Rates for Terrorism Risk Insurance under Cyber Policies (By TRIP-Eligible DEP)**

Source: 2019 TRIP Data Call

<sup>68</sup> FIO, 2018 *Effectiveness Report*, 54.

The total 2018 terrorism take-up rates for cyber terrorism risk insurance are slightly higher than the 2017 figures indicated during the 2018 data collection.<sup>69</sup> The small insurer take-up rate for terrorism risk insurance under standalone cyber policies, however, has dropped significantly. Nevertheless, it appears that small insurer policyholders, for the most part, obtain terrorism risk insurance as part of the cyber package policies that they purchase. Treasury will continue to evaluate the terrorism risk insurance market for cyber coverage in future reports.

#### **4. Nuclear, Biological, Chemical, and Radiological Risk**

TRIA requires participating insurers to offer insurance for terrorism risk on the same basis as insurance offered for other perils. Insurers are not, however, required to offer terrorism risk insurance in the case of perils for which non-terrorism coverage is generally not provided or is specifically excluded.<sup>70</sup> In the 2019 TRIP data call, Treasury began to request information on NBCR coverage provided by insurers, in order to determine the extent to which NBCR coverage may be available under P&C policies.<sup>71</sup>

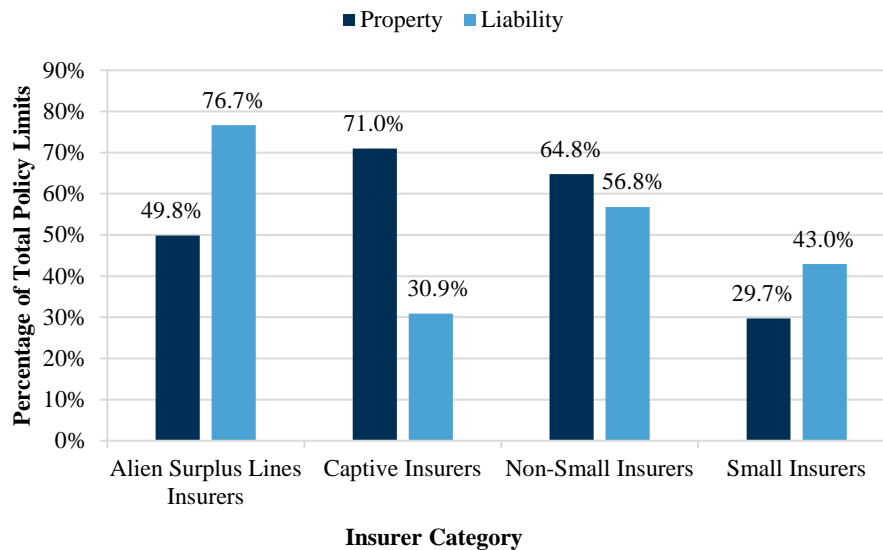
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<sup>69</sup> FIO, *2018 Effectiveness Report*, 55, Figure 38.

<sup>70</sup> See 31 C.F.R. § 50.22(b).

<sup>71</sup> Treasury collected information on both property and liability policy limits where terrorism risk insurance was provided **and** coverage for all NBCR events was **not** entirely excluded. This approach results in an analysis of the policy limit levels where at least some terrorism coverage for NBCR-related events is provided. The data is not a measurement of the limits insured for any particular type of NBCR event (e.g., nuclear). The figures will tend to overstate the total amount of NBCR coverage available, particularly on a per peril basis. Treasury did not seek further information concerning workers' compensation policies because such policies must cover all perils, including NBCR risks.

**Figure 18: 2018 Percentage of Terrorism Risk Insurance Policy Limits Where NBCR Exposures are not Entirely Excluded**



Source: 2019 TRIP Data Call

The extent of coverage for NBCR terrorism events is an important consideration because such losses may pose the greatest risk of aggregation of catastrophic terrorism losses, given the potential size of losses caused by nuclear, biological, chemical, and radiological agents.<sup>72</sup> The reported information indicates that small insurers are more likely to exclude all NBCR-related exposures when they are providing coverage for terrorism risk than other insurers. In addition, the data reflects that each industry segment has a significant amount of terrorism risk exposure that is not subject to a complete exclusion of NBCR-related exposures. However, because of such exclusions, a large NBCR event, depending on the circumstances, could result in significant uninsured losses without necessarily triggering support from the Program.

## 5. Comparison to Other Perils

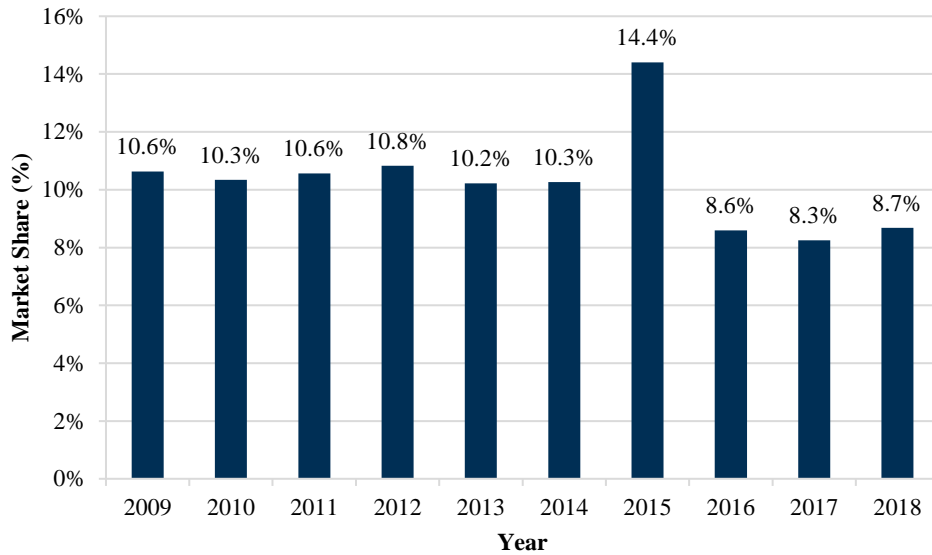
The information collected in connection with the 2017, 2018, and 2019 TRIP data calls shows differences between the participation of small insurers and non-small insurers in the terrorism risk insurance marketplace. The TRIP data calls did not indicate any differences between coverage for terrorism risk as compared to other perils covered by small P&C insurers under

<sup>72</sup> The President's Working Group on Financial Markets cited modeled NBCR event exposures estimates of up to \$158 billion in property losses and \$484 billion in workers' compensation losses. *See, e.g.,* President's Working Group on Financial Markets, *Terrorism Risk Insurance: Report of the President's Working Group on Financial Markets* (2006), 72-73, <https://www.treasury.gov/resource-center/fin-mkts/Documents/report.pdf>. RAND estimated potential losses arising from explosion of 10-kiloton nuclear bomb in a shipping container as exceeding \$1 trillion. Charles Meade and Roger C. Molander, RAND Corporation, *Considering the Effects of a Catastrophic Terrorist Attack* (2006), 6-7, [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).

lines of insurance not subject to TRIP. However, for purposes of this analysis, Treasury examined market share information for small insurers in the P&C lines of insurance that are not subject to the Program.

Figure 19 provides the market share by DEP of small insurers and non-small insurers in P&C lines not subject to TRIP. DEP is calculated using the 2018 small insurer threshold.

**Figure 19: 2009-2018 Small Insurer DEP Market Share in P&C Lines of Insurance Not Subject to TRIP**



Source: S&P Global

Based on the state regulatory reporting data, Figure 19 illustrates that the market share of small insurers measured by DEP in the P&C lines of insurance not subject to the Program has slightly declined since 2009. The market shares generally ranged between 8 percent and 10 percent (which is slightly less than the market share for the TRIP-eligible lines of insurance).

### C. Mandatory Availability Requirement

TRIA requires insurers to make terrorism risk coverage available within the TRIP-eligible lines of insurance on terms that do not materially differ from the terms, amounts, and coverage limitations applicable to losses arising from events other than acts of terrorism.<sup>73</sup> This

<sup>73</sup> TRIA § 103(c); 31 C.F.R. §§ 50.20(a), 50.22(a). If the prospective policyholder does not accept the mandatory offer, the parties may negotiate a different arrangement for terrorism risk coverage which is not on the same terms as provided for other risks. 31 C.F.R. § 50.21(c).

mandatory availability requirement does not include any pricing restrictions,<sup>74</sup> although state law rating requirements may define or limit the amounts that an insurer may charge for terrorism insurance. As described above in Section III, the mandatory availability requirement does not require an insurer to offer terrorism coverage for particular risks that an insurer regularly excludes or for which it does not offer coverage (such as losses arising from NBCR events).<sup>75</sup> As a condition for receiving federal payments under the Program, participants must meet certain documentation requirements to demonstrate compliance with the mandatory availability requirement.<sup>76</sup>

Because insurers must offer terrorism risk insurance in TRIP-eligible lines for the risks that they are otherwise providing coverage, the mandatory availability requirement affects the manner in which insurers underwrite P&C insurance, primarily because of the aggregation risk presented by acts of terrorism. A large-scale terrorist attack can result in significant losses affecting multiple lines of insurance and may be highly concentrated within a limited geographic area. Furthermore, insurers have identified difficulties “in accurately determining the frequency, severity, and loss costs for acts of terrorism,” and stated they “would likely choose to avoid” terrorism risk altogether except for the mandatory availability requirement.<sup>77</sup>

Market participants do not have the option to offer a TRIP-eligible lines policy without the terrorism risk insurance component. Insurers therefore underwrite to manage potential aggregation risks within a particular geographic area or proximity to locations considered potential targets for terrorist activity. Insurers of all sizes may employ this analysis when deciding whether to write policies that are subject to terrorism risk.<sup>78</sup>

Some commenters characterized the Program’s financial support as the “quid pro quo” justifying TRIA’s mandatory availability requirement.<sup>79</sup> Similarly, other commenters noted that the

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<sup>74</sup> See 31 C.F.R. § 50.22(a).

<sup>75</sup> TRIA § 103(c)(2); 31 C.F.R. § 50.22(b).

<sup>76</sup> TRIA § 103(b); 31 C.F.R. Part 50, Subpart B.

<sup>77</sup> National Association of Insurance Commissioners, *Government Relations Issue Brief: Terrorism Risk Insurance* (May 2019), [https://www.naic.org/documents/government\\_relations\\_terrorism\\_risk\\_insurance.pdf](https://www.naic.org/documents/government_relations_terrorism_risk_insurance.pdf). The Congressional Research Service stated that the lack of comprehensive catastrophe loss history makes it difficult for an insurer “to determine which terrorism risks it can take on without putting the company at risk of failure,” and added that the terrorism models, which “are still relatively new compared with hurricane models,” can only partly replace the lack of data. Congressional Research Service, *Terrorism Risk Insurance: Overview and Issue Analysis*, 7-8.

<sup>78</sup> See U.S. Government Accountability Office, *Terrorism Risk Insurance: Market Challenges May Exist for Current Structure and Alternative Approaches* (January 2017), 18-19, <http://www.gao.gov/assets/690/682064.pdf>.

<sup>79</sup> APCIA Comments, 2.

mandatory availability requirement, if unaccompanied by an appropriate level of federal support, could lead to small insurers not providing any TRIP-eligible lines insurance in certain markets:

If [smaller insurers] were forced to exit a market because of their terrorism exposure . . . they would also no longer be offering the other coverages in other lines as well. Because it is not at all clear that remaining companies could or would provide this missing coverage, the probable effect . . . would be to reduce the amount of total private capital allocated to *all risks* in certain areas.<sup>80</sup>

The mandatory availability requirement is not the only factor that may be causing companies to provide terrorism risk insurance that they might otherwise prefer not to write. First, in a number of lines of insurance and jurisdictions, terrorism risk insurance must be provided under state law.<sup>81</sup> In these situations, an insurer must offer terrorism risk insurance irrespective of the mandatory availability requirement. As stated above in Section V.B., small insurers receive a higher percentage of their DEP than non-small insurers from the workers' compensation line of insurance. However, the effects in the market after the September 11 Attacks and prior to the passage of TRIA suggests that continued small insurer participation in this market may be highly dependent upon the existence of the backstop.<sup>82</sup> The unique issues presented by workers' compensation insurance are discussed further in Section V.F.

Second, the ability to offer terrorism risk insurance may be necessary for insurers to compete in certain U.S. markets, particularly large metropolitan areas. Take-up rates for terrorism risk insurance vary by jurisdiction and locality, and the take-up rate of terrorism risk insurance tends to be higher in major metropolitan areas.<sup>83</sup> The TRIP data indicates that the Program promotes policyholder access to a variety of carriers, which might be more limited in the absence of a backstop.

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<sup>80</sup> NAMIC Comments, 2 (emphasis in original).

<sup>81</sup> The principal example here is the workers' compensation line of insurance. See Section V.F. for further discussion regarding workers' compensation. "Fire following" states also require terrorism coverage in some circumstances. See FIO, *2018 Effectiveness Report*, 32, note 84.

<sup>82</sup> See below at Section V.F. for a discussion of how the September 11 attacks affected the workers' compensation residual market.

<sup>83</sup> Marsh & McLennan has stated that "[t]he federal backstop created by TRIA remains crucial to the continued stability of the property terrorism risk insurance market." Its recent report on terrorism risk insurance also noted that take-up rates are highest in major metropolitan areas, and provided location-specific analysis. Marsh & McLennan Companies, *2019 Terrorism Risk Insurance Report* (2019), 11, <https://www.marsh.com/us/insights/research/2019-terrorism-risk-insurance-report.html>.

#### **D. Effect of Increasing the Program Trigger Amount**

This section considers the effect on small insurers of increasing the Program Trigger over time.

As described in Section III, even if an insurer satisfies its individual insurer deductible, total aggregate insured industry losses must exceed the Program Trigger before the federal share of compensation can be paid. Therefore, an insurer with a deductible lower than the Program Trigger could satisfy its insurer deductible, but still find that its terrorism losses – even combined with those of other insurers (if any) – fall short of satisfying the Program Trigger. The Program Trigger requirement therefore could preclude recovery by a small insurer under TRIP, and require it to take additional steps to manage this exposure. This risk is not faced by larger insurers, because they have individual insurer deductibles under the Program that are greater than the Program Trigger.

More than 200 domestic U.S. insurance groups have TRIP deductibles that are less than the Program Trigger. Depending upon the magnitude of the terrorism losses experienced by other insurers, they could face a gap between their insurer deductible and the Program Trigger.<sup>84</sup> This potential gap will likely increase for small insurers as the Program Trigger increases in accordance with the 2015 Reauthorization Act, particularly for those insurers at the lower end of the small insurer size category.

A number of commenters addressed the effects that the Program Trigger has on small insurers. These commenters stated that the Program Trigger should not be increased in the future because of these potential effects, and that it should potentially even be lowered in any future Program reauthorizations.<sup>85</sup>

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<sup>84</sup> This analysis does not include small insurers that wrote TRIP-eligible lines DEP of less than \$10 million and were excused from reporting. This subset of insurers also could be affected.

<sup>85</sup> One commenter stated that “[t]he increase in the program trigger can have a particularly negative impact on small insurers. As the program trigger increases, so does the potential that a small insurer may suffer a loss that has a significant impact on that insurer but yet is not large enough to hit the aggregate industry program trigger. In that event, a small insurer could suffer a very significant loss and yet be unable to call upon the federal backstop.” APCIA Comments, 1. Another commenter said “[i]t is critical that lawmakers not raise the program trigger as they work to reauthorize the Terrorism Risk Insurance Act by the end of the 116th Congress.” NAMIC Comments, 1. A third commenter stated that “[r]aising the program trigger could threaten the solvency of small insurers in the wake of a major terrorism event,” and advocated for a reduction in the Program Trigger as it might apply to workers’ compensation claims, because the exposure cannot be excluded. The commenter observed that “[t]he greatest risk to our surplus is a substantial regional event that does not reach the ever escalating TRIA trigger of \$200 million. Given the more recent examples of terror events in the United States, there is a great risk that a terror event that impacts one of our hospitals could fail to trigger TRIA but could exhaust both our reinsurance layers and our capital and surplus.” Atlantic Charter Comments, 1.



Rating agencies account for the Program's mechanics when assessing the financial condition of insurers that must offer terrorism risk insurance. Prior to the 2015 Reauthorization Act, rating agencies determined that a number of insurers would fail stress tests for terrorism risk in the Program's absence and would be subject to negative rating action in the event of Program non-renewal or material changes in protection. Significantly, the companies falling into this category were more heavily concentrated among smaller insurers, particularly those in the workers' compensation sector.<sup>86</sup>

Treasury does not experience any significant reduction in its financial exposure because of increases in the Program Trigger. Treasury recovers any federal payments for an act of terrorism with total insured losses above the Program Trigger at a rate of 140 percent under the mandatory recoupment provisions of TRIA. Any Program Trigger adjustment should take into consideration a variety of factors, including: other changes to Program mechanics; the market share of small insurers; the extent to which the Program's objectives can be satisfied by adjustments to the Program Trigger; and the availability and cost of private reinsurance to mitigate the impact that a significant terrorism loss may have upon a small insurer that is unable to access Program support solely on account of the Program Trigger.<sup>87</sup> The use of private reinsurance for this purpose is described further in Section V.E.

### **E. Availability and Cost of Private Reinsurance for Small Insurers**

This section considers the availability and cost of private reinsurance for small insurers.

It is difficult to assess the availability and cost of private terrorism risk reinsurance for small insurers. First, reinsurers are not Program participants, and thus are not subject to Treasury's TRIP data calls. Second, reinsurance is neither subject to standard terms and rates, nor to the range of state-level reporting requirements applicable to direct insurers in the admitted market. Finally, reinsurance arrangements are generally highly complex, with many factors affecting price and availability – such as limits, the price of the underlying risk, the amount of available information concerning that underlying risk, the prior claims history between an insurer and its reinsurers, and general market conditions when the reinsurance is sought and purchased.

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<sup>86</sup> See "Future of TRIPRA Remains Uncertain, Rating Pressure Intensifies," *A.M. Best*, October 9, 2013, [http://www3.ambest.com/bestweek/DisplayBinary.aspx?TY=P&record\\_code=217533](http://www3.ambest.com/bestweek/DisplayBinary.aspx?TY=P&record_code=217533). A similar evaluation is taking place in connection with whether the Program will be renewed after December 31, 2020. A.M. Best has stated that it will begin discussions with "[c]ompanies viewed to have material terrorism exposure in addition to a significant reliance on TRIPRA." A.M. Best further stated that these companies will be "asked to present detailed plans on how they will mitigate this exposure in the event that TRIPRA is not renewed . . . . Insurers that currently would be materially affected by the absence of TRIPRA, and cannot provide a sufficient action plan to reduce exposures to terrorism risks, likely will face negative rating pressure by year-end 2019." "TRIPRA Expiration Raises Potential for Rating Downgrades for P/C Insurers," *A.M. Best*, May 10, 2019, [http://www3.ambest.com/bestweek/DisplayBinary.aspx?TY=P&record\\_code=285472](http://www3.ambest.com/bestweek/DisplayBinary.aspx?TY=P&record_code=285472).

<sup>87</sup> Treasury will continue to evaluate these issues in its 2020 Program Effectiveness Report.

Furthermore, reinsurance agreements often cover multiple classes of risks, so it can be difficult to isolate and assess how reinsurance specifically responds to terrorism risks.

A small insurer concerned about its ability to manage terrorism losses above its TRIA deductible (or seeking to transfer risk within its co-pay share) may seek to limit its exposure by purchasing reinsurance. For example, a small insurer could purchase reinsurance that provides reimbursement for any losses experienced above the insurer's deductible if an act of terrorism is certified but the Program Trigger is not met by aggregate industry insured losses. Whether the purchase of such reinsurance is practical (assuming that it is available) will depend, in part, upon the cost of the reinsurance and the insurer's assessment of its ability to bear exposure to such loss without reinsurance. Probable maximum loss (PML) information reflects the largest single loss an insurer projects it might sustain based on the portfolio of policies it has issued. A small insurer with a modest PML, based upon its book of business, will need less reinsurance to protect itself against catastrophic loss, assuming that it has evaluated exposures under its portfolio correctly.<sup>88</sup>

As Treasury observed in its 2017 Small Insurer Study, reinsurance markets typically have been cyclical and a range of macroeconomic factors play a role in the reinsurance market, including the extent of catastrophe losses and available capacity from the reinsurance and capital markets to support risk transfer from the primary insurance market.<sup>89</sup> In early 2017, the reinsurance market had been "soft" for some time, meaning that reinsurance premium rates were relatively low and availability was relatively high.<sup>90</sup> Extreme catastrophe losses in late 2017 suggested that reinsurance rates might finally begin to rise in response to this unprecedented loss experience; however, significant increases had not yet materialized by Q4 2018.<sup>91</sup>

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<sup>88</sup> PML, as defined for purposes of Treasury's collection of data from participating insurers, seeks the largest loss figure for a single insurer emanating from a single location, assuming the detonation of a 5-6 ton truck bomb at that location. See Federal Insurance Office, U.S. Department of the Treasury, *Instructions for Terrorism Risk Insurance Program (TRIP) 2019 Data Call: Small Insurers*, 21, [https://www.treasury.gov/resource-center/fin-mkts/Documents/Small\\_FinalInstructions\\_2019.pdf](https://www.treasury.gov/resource-center/fin-mkts/Documents/Small_FinalInstructions_2019.pdf).

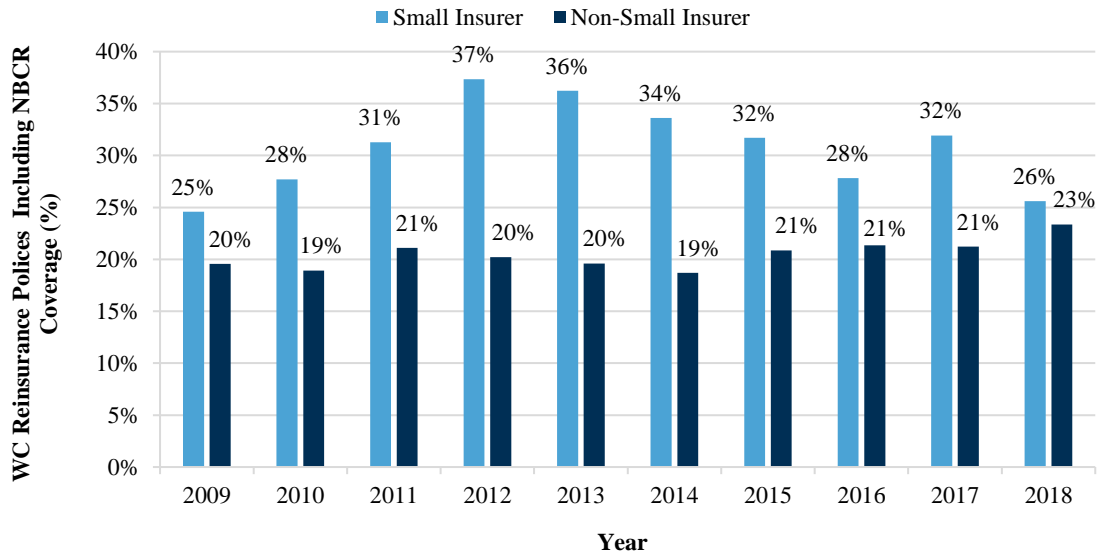
<sup>89</sup> See, e.g., L.S. Howard, "Is Soft Market Bottoming? A.M. Best Points to Some Promising Signs," *Insurance Journal*, January 10, 2017, <http://www.insurancejournal.com/news/international/2017/01/10/438420.htm>.

<sup>90</sup> See FIO, *2017 Small Insurer Study*, 24.

<sup>91</sup> An A.M. Best study of the reinsurance market noted that "[t]he degree of optimism for a material and sustainable improvement in reinsurance pricing that existed immediately following the 2017 catastrophe losses did not develop as anticipated and while pricing terms and conditions did stabilize, they continue to remain below expectations for producing a reasonable risk-adjusted return relative to the average cost of capital for most reinsurers." See "Optimism Fizzles, It's Back to the 'New Normal,'" *A.M. Best*, September 4, 2018, 5, [http://www3.ambest.com/bestweek/DisplayBinary.aspx?TY=P&record\\_code=277679](http://www3.ambest.com/bestweek/DisplayBinary.aspx?TY=P&record_code=277679). However, more recent information (post-dating Treasury's 2019 TRIP data call), has noted property catastrophe reinsurance rate increases in Q2 2019 of between 15 percent to 25 percent on loss-affected accounts. See "Global Reinsurers See Promising Green Shoots in 2019 with 'Hardening' Pricing: S&P," *Insurance Journal*, June 5, 2019, <https://www.insurancejournal.com/news/international/2019/06/05/528442.htm>.

Figure 20 illustrates the percentage of TRIP-eligible lines premiums ceded by direct insurers to reinsurers between 2009 and 2018.

**Figure 20: 2009-2018 Percentage of DEP Ceded By Insurers to Reinsurers (By Insurer Category)**



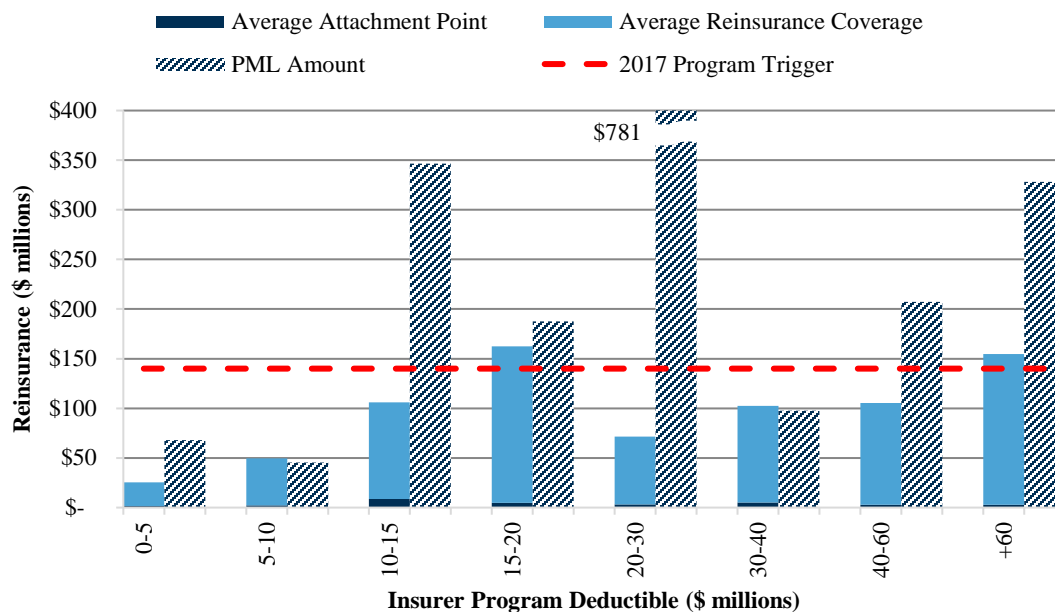
Source: S&P Global

Figure 20 shows that small insurers tend to cede a greater percentage of their direct premiums to reinsurers than do larger insurers.

The 2018 and 2019 TRIP data calls collected information from insurers concerning their purchases of reinsurance for terrorism risk and associated PML figures, which factors in the relative size of the exposures underwritten by small insurers, in order to determine the extent to which PML levels may be guiding reinsurance purchases.<sup>92</sup> Figures 21 and 22 illustrate the 2017 and 2018 average reinsurance purchases for small insurers with reference to small insurer deductibles under the Program, the Program Trigger, and average PML figures reported by those insurers.

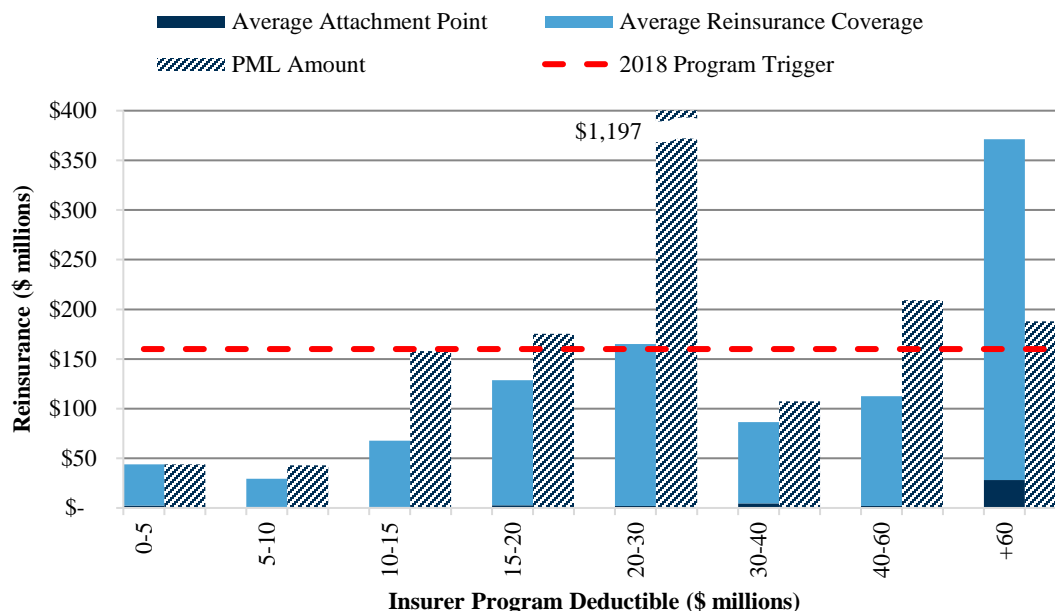
<sup>92</sup> Treasury did not collect PML information from small insurers in its 2017 TRIP Data Call; accordingly, the prior analysis of this issue in Treasury's 2017 Small Insurer Study only considered reinsurance purchases against the Program Trigger and small insurer deductibles, and not PML estimates. See FIO, *2017 Small Insurer Study*, 25-26.

**Figure 21: 2017 Comparison Between Small Insurer Deductibles, Reported PML Figures, and Reinsurance Purchases**



Source: 2018 TRIP Data Call

**Figure 22: 2018 Comparison Between Small Insurer Deductibles, Reported PML Figures, and Reinsurance Purchase**



Source: 2019 TRIP Data Call

Where reinsurance purchases approximate a small insurer's PML, the lack of reinsurance up to the Program Trigger may not be as significant, if this reflects that the small insurer is less likely to be exposed to a catastrophic loss up to the Program Trigger amount. As shown in Figures 21 and 22, PML estimates below the Program Trigger may explain the lack of reinsurance purchases up to the amount of the Program Trigger in some cases. The reported information, however, continues to reflect a significant portion of small insurers that remain exposed for a PML above the insurer deductible and below the Program Trigger threshold, without the support of private reinsurance for that exposure.<sup>93</sup>

The reinsurance information collected by Treasury illustrates a particular aspect of the potential impact of further increasing the Program Trigger. As the Program Trigger increases, more insurers will face a potential gap between their deductible and federal share payments under TRIP. The additional insurers that would be so affected for the first time would be those at the top end of the small insurer category.<sup>94</sup> As the analysis indicates, most insurers of this size already have reinsurance, on average, above the Program Trigger. The more important impact, however, would be upon those companies already characterized as small insurers that would then face a larger gap than is already the case. For such insurers, i.e., all small insurers but particularly the smallest of them, the increase of the Program Trigger would further limit their ability to access payments under the Program, and require them to manage that exposure in other ways, such as through the purchase of private reinsurance, if available, or through other mechanisms.

## **F. Impact of State Workers' Compensation Laws**

The workers' compensation system provides an important mechanism for the protection of U.S. workers from the consequences of employment-related injuries.<sup>95</sup> However, certain aspects of the system increase the aggregate terrorism exposures of insurers participating in the workers' compensation market.

The costs of medical care and treatment, rehabilitation, loss of wages, and other financial hardships are covered under workers' compensation policies. Because payments under these policies are defined by the scope of benefits available under state law and are not subject to

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<sup>93</sup> In addition, the PML data may not fully evaluate a particular insurer's exposure in connection with an act of terrorism, in that the PML information is limited to exposure at a single location, and the aggregation issues posed by terrorism could potentially result in losses at multiple locations for an individual insurer.

<sup>94</sup> For example, if the Program Trigger were to be raised from \$200 million to \$250 million after 2020, only about an additional 10 insurers (based upon the 2018 data) would be characterized as small insurers with a potential gap between their individual deductible and the Program Trigger.

<sup>95</sup> The 2018 Effectiveness Report provides an overview of the workers' compensation system in the United States. FIO, *2018 Effectiveness Report*, 67-68.

express limits of liability, losses under a workers' compensation policy are potentially unlimited.<sup>96</sup> Insurers also have limited ability to collect sufficient premium to cover these potentially unlimited costs, because specific pricing rules under state law may limit pricing flexibility.<sup>97</sup> As a result, a large-scale act of terrorism could create significant aggregation risks for both small insurers and non-small insurers writing workers' compensation insurance, particularly in the event of extensive losses arising from an NBCR event.<sup>98</sup>

Because insurers are required by state law to cover terrorism risk (including NBCR-related terrorism risk) in connection with workers' compensation insurance, workers' compensation carriers must find ways to manage their aggregation risk. One potential option for workers' compensation carriers includes declining to write certain risks altogether. For example, insurers may avoid writing policies that would create a substantial accumulation of exposures in the same location. However, this could present challenges for insurers that seek to write business in large metropolitan areas with dense populations, as well as for employers seeking to purchase coverage in those areas.

To the extent coverage is unavailable in the "voluntary" market, policyholders may need to obtain workers' compensation insurance in a state's residual market, which is required to provide coverage to all applicants.<sup>99</sup> Coverage provided in residual markets tends to require a higher premium, and the responsibility for paying claims is distributed among all insurers writing in the state. After the September 11 Attacks, the market share of residual market mechanisms for workers' compensation significantly increased, and included individual risks viewed as "high

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<sup>96</sup> See Michael Dworsky and Lloyd Dixon, RAND Corporation, *The Impact on Workers' Compensation Insurance Markets of Allowing the Terrorism Risk Insurance Act to Expire* (2014), 5-6, [https://www.rand.org/content/dam/rand/pubs/research\\_reports/RR600/RR643/RAND\\_RR643.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/RR600/RR643/RAND_RR643.pdf).

<sup>97</sup> One commenter previously summarized the development of terrorism loss costs controlling the premium charge for workers' compensation insurance under state law. See Letter from the National Council on Compensation Insurance to the Advisory Committee on Risk-Sharing Mechanisms (June 5, 2017), [https://www.treasury.gov/initiatives/fio/acrs/Docs/National\\_Council\\_on\\_Compensation\\_Insurance\\_June\\_2017.pdf](https://www.treasury.gov/initiatives/fio/acrs/Docs/National_Council_on_Compensation_Insurance_June_2017.pdf). The commenter also explained modeling exercises that determine in part the portion of premium charged for terrorism risk. Because the manner in which the risk is modeled takes into account the existence of the TRIP backstop, the absence of TRIP would necessarily result in increased cost factors. See NCCI Comments, 3-4.

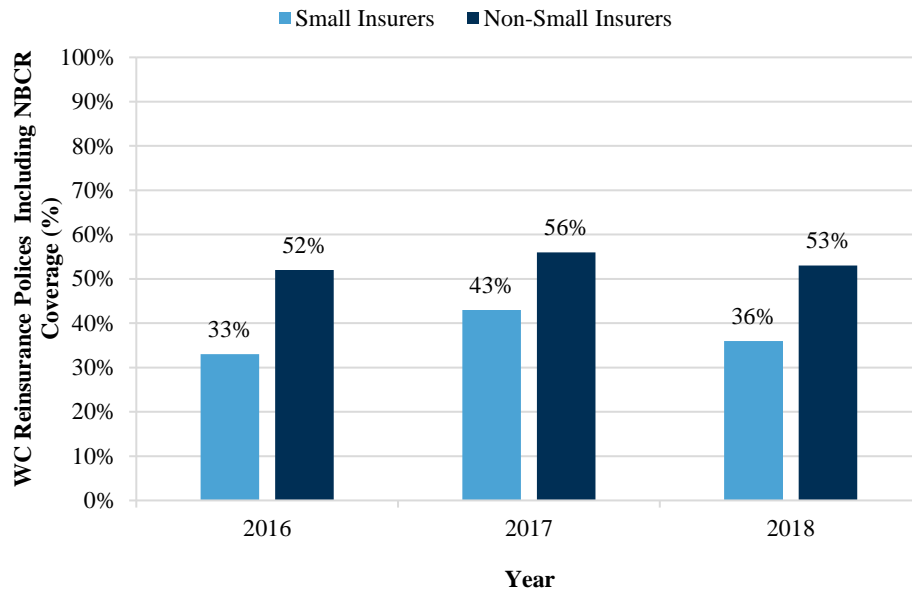
<sup>98</sup> See note 72, above.

<sup>99</sup> A residual market provides insurance coverage for policyholders that cannot obtain coverage in the regular, or voluntary, market. Insurers operating in a particular jurisdiction are generally required to participate in residual markets as a condition of doing business in the voluntary market. The extent of an insurer's participation in the residual market is generally based upon its share of the voluntary market. Depending upon the jurisdiction, insurance costs in the residual market may be higher, or the insurance costs may be subsidized through assessments on taxpayers or insurers, which may then be passed on to all policyholders in the jurisdiction. See, e.g., NCCI Comments, 2-3.

profile” targets for purposes of terrorism risk.<sup>100</sup> Since the enactment of TRIA, the share of the workers’ compensation residual market has stabilized around 4-6 percent of the market, which is a level consistent with the size of the residual market before the September 11 Attacks.<sup>101</sup>

Private reinsurance can help insurers remain in the workers’ compensation market by managing their aggregation risks, including those from NBCR events. Figure 23 analyzes the extent to which private reinsurance purchased by insurers writing workers’ compensation insurance included coverage for NBCR risks associated with workers’ compensation policies.

**Figure 23: 2016-2018 Reinsurance Purchases Including Coverage for Workers’ Compensation Losses Arising from NBCR Risks (By Insurer Category)**



Source: 2017-2019 TRIP Data Calls

All three TRIP data calls indicated that a significant percentage of small insurers with workers’ compensation risks did not purchase any reinsurance coverage for workers’ compensation losses caused by NBCR risks. The minority of small insurers that did obtain reinsurance coverage for this type of risk did so at limits lower than the limits obtained under their conventional terrorism reinsurance policies.<sup>102</sup>

<sup>100</sup> NCCI Comments, 2-3.

<sup>101</sup> NCCI Comments, 2-3.

<sup>102</sup> For example, small insurers that obtained NBCR reinsurance limits for workers’ compensation in 2017 obtained



In contrast, Figure 23 demonstrates that a higher percentage of non-small insurers (over 50 percent in any particular year) obtained reinsurance coverage for workers' compensation losses arising from NBCR risks, as compared to small insurers. However, although the limits such insurers obtained were higher than the limits purchased by small insurers for workers' compensation NBCR exposures, the amounts of coverage that non-small insurers obtained for NBCR risks were much lower than their limits for conventional terrorism risk – only about 15 to 20 percent of total reinsurance limits of such insurers in any one year.<sup>103</sup>

Treasury's data indicates that the unique risks posed by the workers' compensation system have not prevented small insurers from participating in the workers' compensation market. However, it remains unclear to what extent that the Program's existence supports their continued participation. If large workers' compensation losses fall disproportionately upon a small number of participating insurers, and otherwise exceed the Program Trigger, TRIP provides a backstop that operates as a risk-spreading mechanism across the industry. In this situation, the Program could be a factor that allows an insurer to continue participating in the workers' compensation market.<sup>104</sup> Although this risk-spreading mechanism applies irrespective of the size of the insurer participating in the workers' compensation market, it may be more critical for small insurers.

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an average per loss limit of \$47 million compared to a general average terrorism reinsurance limit of \$63 million. In 2018, these respective figures had increased to \$51 million and \$74 million.

<sup>103</sup> For example, in 2018, the reported average purchase of NBCR workers' compensation reinsurance on a per loss basis by non-small insurers that purchased such coverage was \$170 million – as compared with an average limit of \$1.09 billion obtained by those same non-small insurers for conventional terrorism risk.

<sup>104</sup> “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.” FIO, *2016 Effectiveness Report*, 22, note 69. One commenter noted that “[g]iven the challenges presented by the terrorism peril, Congress determined a workable solution was needed that provides primary insurance carriers with a mechanism to manage the impact of the terrorism peril. That solution was the creation of TRIP and it appears it may have contributed to a relatively stable workers compensation insurance market.” NCCI Comments, 4. The National Association of Insurance Commissioners also recently issued a brief stating that “[a]n expiration of TRIA would be particularly disruptive to the workers' compensation market. Workers' compensation benefits are codified in state law and an employer cannot decline to provide coverage for acts of terrorism. Without TRIA, workers' compensation insurers might raise prices or decline to write coverage for businesses with many employees concentrated in single locations or near iconic properties.” National Association of Insurance Commissioners, *Issue Brief: Terrorism Risk Insurance* (May 2019), [https://www.naic.org/documents/government\\_relations\\_terrorism\\_risk\\_insurance.pdf](https://www.naic.org/documents/government_relations_terrorism_risk_insurance.pdf).

## VI. CONCLUSION

Small insurers are significant participants in the market for terrorism risk insurance in the United States, although the market share of small insurers subject to the Program has slightly decreased over the last decade. This decline is generally consistent with Treasury's analysis of the respective market shares for P&C lines of insurance not subject to TRIP. Although both premiums received in TRIP-eligible lines of insurance and policyholder surplus for small insurers have been relatively consistent over the last decade, they have not increased as much as the premiums received by larger insurers, which resulted in the relative decline in small insurer market share.

Treasury's study found that small insurers charge less than non-small insurers for terrorism risk insurance, and small insurers are more likely to charge no premium for such coverage. Additionally, terrorism risk insurance take-up rates by the policyholders of small insurers are lower than the take-up rate for non-small insurers' policyholders. Small insurers also tend to operate on a regional basis by writing in fewer states than non-small insurers. Small insurers also have heavier concentrations of writings in the CMP and workers' compensation lines of insurance (and therefore a larger overall market share in those lines) than non-small insurers. Small insurers issue a very limited number of standalone terrorism insurance policies. However, they do participate in the market for cyber insurance, including cyber terrorism insurance. Furthermore, small insurers' greater market share of workers' compensation lines, where NBCR insurance must be provided, increases the total risk of aggregated exposure arising to small insurers from such losses.

The mandatory availability requirement requires small insurers to offer and write terrorism risk insurance in some circumstances where they otherwise may not. The financial backstop provided by the Program provides some support to mitigate the economic impact of this requirement for small insurers. If the federal backstop becomes insufficient because of changes in market conditions or Program mechanics, the mandatory availability requirement could cause small insurers to not provide insurance in certain markets. This could reduce the availability of insurance – not only of terrorism risk insurance, but also in other TRIP-eligible lines of insurance. However, based upon the data collected and analyzed as part of this Study, it does not appear that the reductions in Program support to date have caused small insurers to withdraw from any particular markets.

Additionally, in some circumstances, the Program Trigger requirement could prevent small insurers who have met their individual insurer deductibles from receiving the federal share of compensation. Small insurers will be protected from outcomes where the aggregate of all insurer losses will exceed the Program Trigger. However, a highly concentrated act of terrorism that affects a limited number of insurers could result in insured losses that fail to reach the Program Trigger. Although small insurers may purchase private reinsurance to avoid this potential risk, the TRIP data calls indicate that many small insurers do not purchase sufficient private reinsurance to address this possibility – however infrequent the potential loss may be.

Small insurers could have the highest potential for unreimbursed losses in connection with the workers' compensation line of insurance. Small insurers have a larger share of this market, which is subject to very high loss amounts with no defined limits of liability and significant potential aggregation risks. Because this line is highly regulated by the U.S. states from a pricing standpoint, insurers that write workers' compensation insurance may find it difficult to buy reinsurance that will cover the risks that they write. Treasury's data also indicates that many small insurers do not obtain reinsurance coverage for NBCR-related losses in workers' compensation lines.

## Appendix 1: 2018 Take-Up Rates by State

Appendix 1 to this Study contains a table setting forth numerically the 2018 take-up rates, based upon premium, presented graphically in Figures 12 and 13, by state for both small and non-small insurers. As noted above, workers' compensation is not included within these figures, although excess workers' compensation is included.

	Non-Small Insurers	Small Insurers	Combined
Alabama	64%	73%	65%
Alaska	44%	66%	47%
Arizona	67%	54%	66%
Arkansas	70%	67%	70%
California	63%	39%	61%
Colorado	62%	44%	61%
Connecticut	72%	72%	72%
Delaware	64%	62%	64%
District of Columbia	67%	81%	68%
Florida	56%	32%	52%
Georgia	69%	66%	68%
Hawaii	55%	83%	59%
Idaho	60%	71%	62%
Illinois	69%	35%	63%
Indiana	64%	77%	66%
Iowa	66%	69%	66%
Kansas	68%	59%	68%
Kentucky	70%	54%	68%
Louisiana	55%	50%	55%
Maine	69%	89%	72%
Maryland	74%	79%	75%
Massachusetts	69%	66%	69%
Michigan	71%	70%	71%
Minnesota	64%	74%	65%
Mississippi	67%	64%	67%
Missouri	70%	59%	68%
Montana	62%	53%	61%
Nebraska	66%	69%	66%
Nevada	67%	49%	66%
New Hampshire	67%	80%	69%
New Jersey	68%	69%	68%
New Mexico	69%	63%	69%
New York	67%	62%	66%

	Non-Small Insurers	Small Insurers	Combined
North Carolina	72%	77%	73%
North Dakota	59%	62%	60%
Ohio	70%	69%	70%
Oklahoma	68%	58%	67%
Oregon	65%	58%	65%
Pennsylvania	72%	71%	72%
Rhode Island	72%	59%	71%
South Carolina	64%	72%	65%
South Dakota	57%	71%	59%
Tennessee	71%	63%	71%
Texas	60%	53%	60%
Utah	68%	47%	67%
Vermont	66%	92%	71%
Virginia	70%	68%	70%
Washington	63%	50%	62%
West Virginia	69%	62%	68%
Wisconsin	68%	66%	67%
Wyoming	66%	52%	65%

Source: 2019 TRIP Data Call

## Appendix 2: 2018 Take-Up Rates by State and Line Groups

Appendix 2 to this Study contains more detailed take-up information for small and non-small insurers, by state and by groups of TRIP-eligible lines of insurance. In order to streamline the data display, and provide information by more general categories of information, Treasury displays the information by the following categories: (1) Property Insurance;<sup>105</sup> and (2) Liability Insurance.<sup>106</sup> Evaluation of Appendix 2 permits identification of differences in take-up, on a state-by-state basis, as between small insurers and non-small insurers, by the more general coverage categories identified.

	Non-Small		Small		Combined	
	Property	Liability	Property	Liability	Property	Liability
Alabama	77%	68%	69%	62%	70%	63%
Alaska	77%	62%	48%	47%	53%	50%
Arizona	67%	45%	81%	64%	80%	62%
Arkansas	76%	57%	75%	66%	75%	65%
California	42%	35%	74%	58%	71%	56%
Colorado	59%	31%	70%	60%	69%	57%
Connecticut	80%	61%	82%	72%	82%	71%
Delaware	75%	64%	81%	64%	80%	64%
District of Columbia	89%	70%	85%	70%	86%	70%
Florida	23%	46%	53%	58%	45%	56%
Georgia	82%	54%	79%	64%	79%	63%
Hawaii	91%	78%	60%	53%	66%	57%
Idaho	81%	62%	74%	60%	75%	60%
Illinois	84%	22%	81%	64%	81%	54%
Indiana	81%	77%	66%	63%	68%	65%
Iowa	81%	71%	74%	63%	75%	64%
Kansas	71%	36%	75%	64%	74%	62%
Kentucky	55%	53%	71%	67%	69%	66%
Louisiana	59%	45%	55%	54%	56%	53%
Maine	95%	88%	77%	67%	81%	71%
Maryland	85%	74%	83%	73%	83%	73%
Massachusetts	79%	49%	79%	67%	79%	65%
Michigan	80%	72%	80%	69%	80%	69%
Minnesota	79%	65%	70%	62%	72%	62%
Mississippi	71%	55%	70%	65%	70%	64%
Missouri	79%	40%	78%	62%	78%	59%

<sup>105</sup> Fire, Allied Lines, Boiler & Machinery, and Commercial Multi-Peril (Property) combined.

<sup>106</sup> Commercial Multi-Peril (Liability), Products Liability, and Other Liability combined.

	Non-Small		Small		Combined	
	Property	Liability	Property	Liability	Property	Liability
Montana	56%	47%	72%	60%	70%	58%
Nebraska	78%	57%	73%	64%	74%	63%
Nevada	51%	41%	76%	62%	74%	61%
New Hampshire	87%	73%	79%	65%	81%	66%
New Jersey	79%	61%	77%	67%	77%	66%
New Mexico	73%	51%	79%	68%	78%	66%
New York	80%	50%	81%	64%	81%	62%
North Carolina	86%	70%	82%	71%	83%	71%
North Dakota	75%	52%	67%	55%	69%	55%
Ohio	70%	68%	79%	69%	78%	69%
Oklahoma	72%	37%	74%	61%	74%	58%
Oregon	64%	57%	77%	62%	76%	61%
Pennsylvania	75%	66%	82%	69%	81%	69%
Rhode Island	65%	54%	83%	72%	80%	71%
South Carolina	82%	62%	67%	66%	69%	66%
South Dakota	76%	70%	61%	54%	63%	57%
Tennessee	68%	60%	80%	70%	79%	69%
Texas	59%	39%	66%	56%	65%	55%
Utah	67%	39%	80%	65%	79%	63%
Vermont	95%	90%	75%	60%	81%	65%
Virginia	85%	56%	80%	69%	81%	68%
Washington	56%	50%	72%	61%	71%	60%
West Virginia	80%	47%	81%	60%	81%	59%
Wisconsin	77%	58%	78%	63%	78%	62%
Wyoming	70%	39%	75%	63%	74%	61%

Source: 2019 TRIP Data Call