

Report on the Effectiveness of the Terrorism Risk Insurance Program

FEDERAL INSURANCE OFFICE, U.S. DEPARTMENT OF THE TREASURY
*Completed pursuant to the Terrorism Risk Insurance Program
Reauthorization Act of 2015*

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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, <i>Report on the Overall Effectiveness of the Terrorism Risk Insurance Program</i> (June 2016)
2017 TRIP Data Call	.....	CY 2016 data requested by Treasury pursuant to 82 Fed. Reg. 20420 (May 1, 2017)
2017 Small Insurer Study	.....	FIO, <i>Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace</i> (June 2017)
2018 TRIP Data Call	.....	CY 2017 data requested by Treasury pursuant to 83 Fed. Reg. 14718 (April 5, 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 NAIC's 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
Certified Policy	.....	Standalone terrorism risk policy written subject to the terms and conditions of TRIP
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 2017 was 17 percent
CY	.....	Calendar year
CMP	.....	Commercial Multi-Peril
DEP	.....	Direct earned premiums
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 2017 was 83 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
NAIC	.....	National Association of Insurance Commissioners
NBCR	.....	Nuclear, biological, chemical, or radiological
Non-Certified Policy	.....	Standalone terrorism policy which responds to terrorism-related losses, as defined in the policy, regardless of whether the Secretary has certified that an "act of terrorism" under TRIA has given rise to those losses
Non-Small Insurer	.....	Domestic insurer or group (including affiliated alien surplus lines insurers) with DEP in TRIP-eligible lines of insurance or policyholder surplus above the small insurer threshold
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
Report	.....	FIO, <i>Report on the Overall Effectiveness of the Terrorism Risk Insurance Program</i> (June 2018)
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)

Standalone Policy	.....	Insurance policy which provides coverage only for terrorism risk
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 TRIP pursuant to 31 C.F.R. § 50.4(w)

I. INTRODUCTION AND EXECUTIVE SUMMARY

Under the Terrorism Risk Insurance Program Reauthorization Act of 2015 (2015 Reauthorization Act),¹ the Secretary of the Treasury (Secretary) is required to submit a report regarding the Terrorism Risk Insurance Program (TRIP or Program) to the Committee on Financial Services of the House of Representatives, and the Committee on Banking, Housing, and Urban Affairs of the Senate.² The report must be submitted no later than June 30, 2018, and must include:

- (1) an analysis of the overall effectiveness of the Program;
- (2) an evaluation of any changes or trends in the data collected by the Secretary;
- (3) an evaluation of whether any aspects of the Program have the effect of discouraging or impeding insurers from providing commercial property and casualty (P&C) insurance coverage or coverage for acts of terrorism;
- (4) an evaluation of the impact of the Program on workers' compensation insurers; and
- (5) an estimate of the total amount of premiums earned on terrorism risk insurance since January 1, 2003.³

The 2015 Reauthorization Act also requires the Secretary to collect data related to the Program on an annual basis.⁴ Since the 2015 Reauthorization Act, the U.S. Department of the Treasury (Treasury) has conducted three data calls – a voluntary call in 2016 seeking calendar year 2015 data, and two mandatory calls in 2017 and 2018 requiring, respectively, the production of 2016 and 2017 data. This report (Report) addresses the five statutory considerations identified above, and uses the 2017 and 2018 TRIP data calls to comply with the requirements of the 2015 Reauthorization Act.

¹ Terrorism Risk Insurance Reauthorization Act of 2015, 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”)”].

² Beginning in 2016, the Secretary was required to submit a report to the Committee on Financial Services of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate no later than June 30, 2016, and every other June 30 thereafter through the Program's expiration date of December 31, 2020. Treasury published its first Program effectiveness report on June 30, 2016. See FIO, U.S. Department of the Treasury, *Report on the Overall Effectiveness of the Terrorism Risk Insurance Program* (2016), https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2016_TRIP_Effectiveness_Report_FINAL.pdf. This is the second Program effectiveness report published by Treasury; the third must be submitted no later than June 30, 2020.

³ TRIA § 104(h)(2).

⁴ TRIA § 104(h)(1).

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

- (1) The Program generally has been effective in making terrorism risk insurance available and affordable in the insurance marketplace. Refer to Sections V, VI, and VII.
- (2) The 2016 and 2017 data collected by Treasury indicates that the market for terrorism risk insurance has been relatively stable over this two-year period, with few observable differences in relevant benchmarks, such as price and take-up rate. Refer to Sections V, VI, and VII.
- (3) Treasury has not observed any aspects of the Program (either based upon the collected data or operation of the Program generally) that have had the effect of discouraging or impeding insurers from providing P&C insurance in general, or coverage for acts of terrorism specifically. Refer to Sections V, VI, and VII.
- (4) The Program serves as an important backstop to workers' compensation insurance, given that under state law, workers' compensation insurance must cover terrorism risk, is not subject to limits of liability, and cannot exclude causes of loss posing extreme aggregation risks. Refer to Section V and VII.
- (5) Treasury's estimate of total earned premiums for terrorism risk insurance from 2003 to 2017 is approximately \$37.6 billion (excepting captive insurers), which is between 1 and 2 percent of the total premiums earned in the TRIP-eligible lines of insurance during that period. Refer to Section VIII.

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 \$44 billion of P&C insurance losses,⁵ more than two-thirds of which were reimbursed by reinsurers to insurers.⁶ 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.”⁷ 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).⁸ 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” within the meaning of TRIA and certified by the Secretary are eligible for reimbursement through the Program.⁹ The Program is housed in Treasury and administered by the Secretary with the assistance of the Federal Insurance Office (FIO).¹⁰

TRIA originally authorized the Program for a three-year period ending December 31, 2005. The Program has since been reauthorized three times,¹¹ most recently by the 2015 Reauthorization Act, which extended the Program through December 31, 2020.¹² Changes enacted with each

⁵ Insured losses shown in 2016 dollars. See Charlene Chia, “Assessing Terrorism Risk 15 Years After 9/11,” *AIR Worldwide*, September 8, 2016, <http://www.air-worldwide.com/Publications/AIR-Currents/2016/Assessing-Terrorism-Risk-15-Years-After-9/11/>.

⁶ “9/11 and Insurance: The Eight Year Anniversary,” *Insurance Journal*, September 11, 2009, <http://www.insurancejournal.com/news/national/2009/09/11/103694.htm>.

⁷ TRIA § 101(a)(5).

⁸ 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. Definitions, 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 Definitions, 31 C.F.R. § 50.4(w)(2) (2018).

⁹ Further details concerning the operation of the Program are provided in Section III of this Report.

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

¹¹ 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.

¹² Treasury issued rules in December 2016 to implement changes to TRIA under the 2015 Reauthorization Act, and for other purposes. See 81 Fed. Reg. 88592 (December 7, 2016) (Certification Interim Final Rule); 81 Fed. Reg. 93756 (December 21, 2016) (Program Final Rules except Certification).

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

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.¹³ 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.¹⁴

The 2017 and 2018 TRIP data calls are discussed in Section IV below.

¹³ TRIA § 104(h)(1).

¹⁴ TRIA §§ 104(h)(1)(A)-(G).

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.¹⁵ 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.”¹⁶ The “make available” requirement applies only to TRIP-eligible lines of insurance.¹⁷ TRIA does not mandate that insurers offer terrorism risk insurance at a particular price,¹⁸ nor does TRIA require any policyholder to purchase insurance for terrorism risk.¹⁹ 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;²⁰ 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.²¹

¹⁵ An insurer is defined under TRIA as any entity, including any affiliate thereof, which receives direct earned premiums (DEP) 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).

¹⁶ TRIA § 103(c)(2).

¹⁷ 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 Section V.D.

¹⁸ State insurance rating laws and regulations may affect the price that can be charged by insurers writing terrorism risk insurance subject to TRIA.

¹⁹ 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 VII.

²⁰ 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).

²¹ TRIA § 102(1)(A).

Additionally, the Secretary may not certify an act that results in P&C insurance losses totaling \$5 million or less,²² or that was committed as part of the course of a war declared by Congress.²³

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.²⁴ Treasury is then required to obtain reimbursement of certain payments of the federal share of compensation through a recoupment process, and may obtain 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 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 payments from Treasury under the Program: the insurer's losses must exceed its deductible (as defined under the Program), and the Program Trigger must be satisfied. An individual insurer's deductible is 20 percent of the insurer's direct earned premiums (DEP) in the TRIP-eligible lines for the prior calendar year.²⁵

Program Trigger

The Program Trigger is the minimum amount of insurance industry aggregate insured losses resulting from a certified act (or acts) of terrorism taking place in a particular calendar year that must be sustained before any federal payments are made. The Program Trigger was \$120 million in calendar year 2016 and \$140 million in calendar year 2017 (the principal years addressed by this Report);²⁶ it will continue to increase by \$20 million per calendar year until it reaches \$200 million in 2020.²⁷ Once the Program Trigger has been satisfied, Treasury will

²² TRIA § 102(1)(B)(ii).

²³ 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).

²⁴ Any determination by Treasury is made pursuant to the Program regulations. *See* Terrorism Risk Insurance Program, 31 C.F.R. Part 50 (2018).

²⁵ TRIA § 102(7).

²⁶ TRIA § 103(e)(1)(B). The 2015 Reauthorization Act provided for certain changes in Program mechanics from the date of the 2015 Reauthorization through the expiration date for the Program in 2020. This Report focuses upon the Program structure in place in 2016 and 2017 because much of the Report's analysis is based on the 2017 and 2018 TRIP data calls, which collected year-end data for Calendar Year (CY) 2016 and CY 2017, respectively.

²⁷ 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

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 calendar year 2016, the federal share of compensation was 84 percent of an insurer's losses above its deductible, with the insurer responsible for the remaining 16 percent. In calendar year 2017, the federal share of compensation decreased to 83 percent and the insurer share increased to 17 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.²⁸

Program Cap

TRIA limits the aggregate exposure of both insurers and the federal government arising from insured losses for an act or acts of terrorism. Specifically, TRIA prohibits the Secretary from making payments for any portion of aggregate insured losses (counting amounts paid by Program participants as well as the federal government) from acts of terrorism which exceed the "Program Cap" of \$100 billion during any calendar year.²⁹ 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.³⁰

Recoupment

TRIA includes a mechanism for the Secretary to collect "terrorism loss risk-spreading premiums" from insurers if federal payments are made to insurers. Under this mechanism, known as recoupment, insurers writing in TRIP-eligible lines of insurance may be required to collect funds from policyholders by placing a surcharge on insurance policies written in those 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. These surcharges must then be remitted to the Secretary.³¹ The requirement to collect, or recoup, terrorism loss risk-

change was made to the Program Trigger, which remained at \$100 million. The 2015 Reauthorization Act, however, provided for an annual increase in the Program Trigger beginning in 2016.

²⁸ TRIA § 103(e)(1)(A).

²⁹ TRIA § 103(e)(2)(A).

³⁰ TRIA § 103(e)(2)(A). TRIA requires the Secretary to notify Congress if insured losses are projected to exceed the Program Cap and in that case to determine the pro rata share of insured losses to be paid by each affected insurer. TRIA §§ 103(e)(2)-(3).

³¹ TRIA §§ 103(e)(7)-(8).

spreading premiums applies not only to insurers that received federal payments under the Program, but also to all insurers writing policies in TRIP-eligible lines of insurance. Surcharges are placed on all eligible insurance policies regardless of whether the policyholder purchases terrorism risk insurance.³²

³² 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).

IV. DATA COLLECTION

A. Data Collection Process

This Report is based primarily on the results of Treasury's 2017 and 2018 TRIP data calls. In addition, Treasury performed qualitative research and sought input from stakeholders, including insurers, state insurance regulators, the National Association of Insurance Commissioners (NAIC), and the general public, through a Federal Register Notice seeking comments.³³ Treasury also reviewed publicly-available data reported by insurers to state regulators. The 2017 and 2018 TRIP data calls were mandatory for participating insurers, subject to an exception for small insurers that wrote less than \$10 million in TRIP-eligible lines premiums in each reporting year, respectively.³⁴

Treasury collected data on a group basis (combining affiliated companies) because TRIP is generally administered on a group basis.³⁵ The information collected included data concerning premiums, policy exposures, policyholder take-up rates, and reinsurance.³⁶ Treasury collected

³³ See 2018 Report on the Effectiveness of the Terrorism Risk Insurance Program, 83 Fed. Reg. 11815 (March 16, 2018), <https://www.gpo.gov/fdsys/pkg/FR-2018-03-16/pdf/2018-05433.pdf>. In response to the foregoing notice for comments, Treasury received 10 substantive comments addressing the Program, from: the National Association of Insurance Commissioners (NAIC Comments); the National Council on Compensation Insurance (NCCI Comments); Marsh & McLennan Companies, attaching Marsh's 2018 Terrorism Risk Insurance Report (Marsh Comments); a consolidated submission from the American Insurance Association, the National Association of Mutual Insurance Companies, and the Property Casualty Insurers Association of America (AIA/NAMIC/PCI Comments); the Reinsurance Association of America (RAA Comments); the National Association of Realtors (NAR Comments), Lloyd's of London (Lloyd's Comments); the Vermont Captive Insurance Association (VCIA Comments), the Coalition to Insure Against Terrorism (CIAT Comments); and the Council of Insurance Agents and Brokers (CIAB Comments). All comments are available at <https://www.regulations.gov/docket?D=TREAS-TRIP-2018-0005>.

³⁴ Treasury estimates that insurers eligible for this reporting exception (approximately 400 in total) represented less than 0.5 percent of the TRIP-eligible lines premium market for purposes of both the 2017 and 2018 TRIP data call. See S&P Global Market Intelligence (as of May 31, 2018).

³⁵ An "affiliate" under TRIP is "any entity that controls, is controlled by, or is under common control with the insurer." Definitions, 31 C.F.R. § 50.4(c) (2018). 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 Insurer Responsibility, 31 C.F.R. § 50.96 (2018). Insurer groups may include both domestic insurers as well as foreign insurers that write business in the United States only on a surplus lines basis.

³⁶ See Annual Data Reporting, 31 C.F.R. § 50.51(b) (2018).

information from four insurer categories: small insurers,³⁷ larger licensed insurers above the small insurer threshold (non-small insurers), captive insurers, and alien surplus lines insurers.³⁸

Treasury collected data through a third-party insurance statistical aggregator, as required by the 2015 Reauthorization Act.³⁹ The statistical aggregator provided results to Treasury in an aggregated, anonymous format that did not identify any particular reporting insurer. Treasury obtained most of the workers' compensation insurance elements from the National Council on Compensation Insurance (providing 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.

State insurance regulators also began annually collecting data relating to terrorism risk insurance in 2016. The state insurance regulator data calls have sought information similar to that collected by Treasury, although in some cases on a more detailed, granular basis. Given the similarity of the information sought by Treasury and state insurance regulators, and the burden caused to insurers by the existence of dual data calls on the same subject, industry commenters advocated for the development of a consolidated data collection approach.⁴⁰ Beginning with the 2018 TRIP data call, Treasury and state insurance regulators developed a consolidated data call designed to satisfy each of their respective statutory mandates and objectives while permitting reporting insurers to submit, for the most part, the same information to both Treasury and state insurance regulators.⁴¹ The consolidated collection approach has and will continue to

³⁷ Small insurers are defined with reference to the size of the insurer's policyholder surplus and TRIP-eligible DEP in the immediately preceding year as compared with an amount five times the size of the Program Trigger. See Definitions, 31 C.F.R. § 50.4(z). See also FIO, U.S. Department of the Treasury, *Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace* (2017), 6-7, [https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/Study_of_Small_Insurer_Competitiveness_in_the_Terrorism_Risk_Insurance_Marketplace_\(June_2017\).pdf](https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/Study_of_Small_Insurer_Competitiveness_in_the_Terrorism_Risk_Insurance_Marketplace_(June_2017).pdf).

³⁸ Each insurer category was provided with a different reporting template which was tailored to that category.

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

⁴⁰ See generally AIA/NAMIC/PCI Comments.

⁴¹ For the 2018 TRIP data call, Treasury and state insurance regulators used joint reporting templates that were substantially similar to those used by Treasury in prior years, subject to minor changes based upon Treasury's experience with the 2017 TRIP data call, coordination with state insurance regulators and the NAIC, and feedback from participating insurers. See Terrorism Risk Insurance Program 2018 Data Call, 82 Fed. Reg. 56328 (November 28, 2017), <https://www.gpo.gov/fdsys/pkg/FR-2017-11-28/pdf/2017-25402.pdf>; 2018 Data Call Under the Terrorism Risk Insurance Program, 83 Fed. Reg. 14718 (April 5, 2018), <https://www.gpo.gov/fdsys/pkg/FR-2018-04-05/pdf/2018-06996.pdf>. Treasury received 5 non-duplicative substantive comments from interested parties addressing the proposed 2018 TRIP data call templates and data collection approach, which are available at <https://www.regulations.gov/docket?D=+TREAS-TRIP-2017-0015>.

significantly reduce burdens on insurers required to report information to both Treasury and state insurance regulators.⁴²

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. These insurer categories included non-small and small domestic insurers that are “admitted” or licensed to write business in at least one U.S. jurisdiction,⁴³ domestic and foreign insurers that have been permitted as a matter of 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.⁴⁴

For 2018, 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* 2016 DEP in TRIP-eligible lines of insurance of less than \$700 million *and* a 2016 policyholder surplus of less than \$700 million. The small insurer threshold is calculated annually in relation to the Program Trigger amount.⁴⁵
- (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 are regulated by the captive insurance laws of a particular state jurisdiction. Captive insurers are discussed in further detail in Section VI.B, below.
- (4) **Alien Surplus Lines Insurers:** Alien surplus lines insurers that are not affiliated with either a domestic non-small or small insurer. Alien surplus lines insurers are discussed in further detail in Section VI.C, below.

⁴² See AIA/NAMIC/PCI Comments, 15 (acknowledging that the coordinated data call has “reduced reporting burdens on insurers”).

⁴³ 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,” NAIC, http://www.naic.org/consumer_glossary.htm.

⁴⁴ 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 Definitions, 31 C.F.R. § 50.4(o)(1)(i)(B). See also “Glossary of Insurance Terms,” NAIC, http://www.naic.org/consumer_glossary.htm.

⁴⁵ See FIO, *2017 Small Insurer Study*, 6-7, 21-23.

As shown in Figure 1, the 2017 and 2018 TRIP data calls yielded the following statistics concerning the insurer categories participating in TRIP, as indicated by reported TRIP-eligible DEP.

Figure 1: TRIP-Eligible DEP By Insurer Category⁴⁶

	2017 TRIP Data Call		2018 TRIP Data Call	
	2016 DEP in TRIP-Eligible Lines	% of Total	2017 DEP in TRIP-Eligible Lines	% of Total
Alien Surplus Lines Insurers	\$ 7,421,060,583	4%	\$ 9,492,933,571	5%
Captive Insurers	7,930,646,027	4%	9,046,977,906	4%
Non-Small Insurers	168,238,219,882	83%	168,843,991,084	81%
Small Insurers	20,085,947,637	10%	21,763,719,578	10%
Total	\$ 203,675,874,129	100%	\$ 209,147,622,139	100%

Source: 2017 and 2018 TRIP data calls

Figure 2 illustrates the total amount of premiums in the TRIP-eligible lines of insurance reported by non-small and small insurers in the 2017 and 2018 TRIP data calls. For a breakdown of the terrorism risk insurance premium component of this premium, see Figure 46 (Section VII).

Figure 2: TRIP-Eligible DEP by TRIP-Eligible Lines of Insurance (Non-Small and Small Insurers)

	2017 TRIP Data Call		2018 TRIP Data Call	
	2016 DEP in TRIP-Eligible Lines	% of Total	2017 DEP in TRIP-Eligible Lines	% of Total
Aircraft (all perils)	\$ 1,200,951,210	1%	\$ 1,394,564,096	1%
Allied Lines	6,454,504,641	3%	6,218,007,728	3%
Boiler and Machinery	1,438,747,105	1%	1,489,496,637	1%
Commercial Multiple Peril (liab.)	13,845,387,346	7%	14,157,059,153	7%
Commercial Multiple Peril (non-liab.)	24,006,088,416	13%	23,751,976,210	12%
Excess Workers' Compensation	1,010,954,299	1%	1,289,645,245	1%
Fire	7,685,944,056	4%	9,366,961,098	5%
Inland Marine	14,329,918,264	8%	14,654,016,568	8%
Ocean Marine	2,404,937,056	1%	2,217,096,257	1%
Other Liability	43,672,168,577	23%	44,255,197,602	23%
Products Liability	3,399,518,654	2%	3,208,655,630	2%
Workers' Compensation	68,875,047,895	37%	68,605,034,438	36%
Total	\$ 188,324,167,519	100%	\$ 190,607,710,662	100%

Source: 2017 and 2018 TRIP data calls

⁴⁶ Some figures may not add to 100 percent due to rounding.

C. Response Rate

Treasury estimates that the response rate for domestic insurers in the 2018 TRIP data call (measured by TRIP-eligible DEP) was at least 99 percent for non-small insurers, and at least 85 percent for small insurers. Treasury estimates that at least 98 percent of non-small insurers and at least 88 percent of small insurers reported in the 2017 TRIP data call.⁴⁷

Treasury estimates that at least 95 percent of alien surplus lines insurers responded to the 2018 TRIP data call, an increase from the 2017 estimated data call response rate of 85 percent.⁴⁸

Determining the response rate for captive insurers under TRIP is more difficult because captive insurers typically do not submit publicly available information that could be used by Treasury to independently evaluate their response rate. Therefore, Treasury also consulted with state insurance regulators to help determine whether the appropriate number of captive insurers reported for the TRIP data calls.⁴⁹ Treasury estimates that the significant majority of captive insurers participating in the Program provided information in response to both the 2017 and 2018 TRIP data calls.

Treasury used the data from the 2017 and 2018 TRIP data calls as one of the main bases upon which to draw conclusions respecting the effectiveness of the Program.⁵⁰

D. Data Quality Evaluation

TRIA's coverage extends to "commercial property and casualty insurance." Treasury implemented this statutory coverage mandate at the outset of the Program by defining it using the lines of insurance established for purposes of state regulation and reporting. This implementation promoted the efficient administration of the Program for companies accustomed

⁴⁷ Treasury evaluated the response rates to the 2017 and 2018 TRIP data calls by analyzing information reported to state insurance regulators as well as independently analyzing insurers where the available state data was not dispositive of the particular insurer's obligation to participate in the TRIP data call. Some amount of non-reporting may be attributable to small insurers that are under the reporting threshold. Treasury will continue to analyze its response rate.

⁴⁸ Alien surplus lines insurers also report certain information to state regulators, and Treasury used a similar process to evaluate the response rate for alien surplus lines insurers as the process used for domestic insurers.

⁴⁹ Treasury only requires reporting from captive insurers to the extent that they issue terrorism risk insurance that is subject to the Program. Captive insurers that write policies in the TRIP-eligible lines of insurance, but which do not provide any terrorism risk insurance, do not have a reporting requirement. See 83 Fed. Reg. 14718 (April 5, 2018).

⁵⁰ By comparison, Treasury's initial 2016 Effectiveness Report was based upon Treasury's voluntary 2016 TRIP data call, in which only approximately 41 percent (by TRIP-eligible DEP) of participating insurers reported data, and only limited information was reported by alien surplus lines and captive insurers. See FIO, *2016 Effectiveness Report*, 8-9, <https://www.treasury.gov/initiatives/fio/reports-and-notice/2016-TRIP-Effectiveness-Report-FINAL.pdf>.

to reporting data according to existing standards.⁵¹ This also enables Treasury to determine whether the data reported by non-small and small insurers under TRIP data calls is generally consistent with similar data reported for state regulatory purposes.⁵²

Although TRIA generally applies to these lines of insurance, it excludes certain types of insurance from the Program that otherwise falls within these lines for state statutory reporting purposes. 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.⁵³

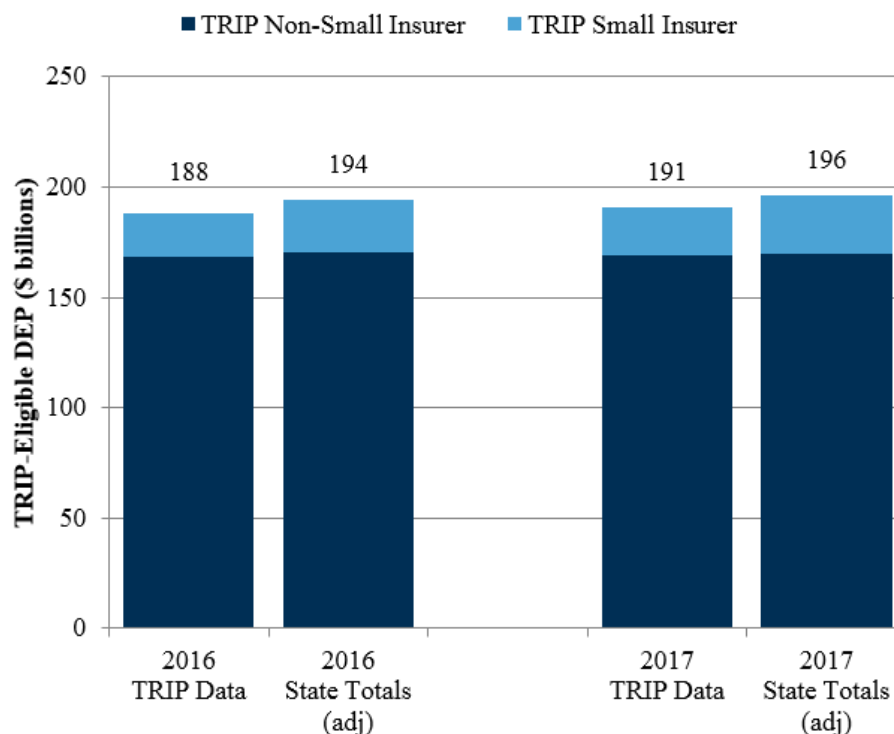
⁵¹ See, e.g., Terrorism Risk Insurance Program, 68 Fed. Reg. 41250, 41256-59 (July 11, 2003), <https://www.gpo.gov/fdsys/pkg/FR-2003-07-11/pdf/03-17585.pdf>.

⁵² For purposes of this Report, Treasury evaluated the data reported by domestic non-small and small insurers that regularly make public statutory insurance filings by comparing the Treasury data with the reporting lines for state insurance regulatory purposes. Treasury has previously addressed this adjustment process in prior reports. See *2017 Small Insurer Study*, 11. Most alien surplus lines and captive insurers do not make such filings; therefore, this analysis does not extend to those Program participants.

⁵³ See generally TRIA § 102(11). Other small (and offsetting) differences arise from the manner in which Treasury collects data. Although Treasury does not require reporting from insurers that have written less than \$10 million of premiums in TRIP-eligible lines of insurance in the reporting period, this accounts for less than 0.5 percent of all TRIP-eligible lines premiums in a given year. On the other hand, although Treasury requires alien surplus lines insurers that are affiliated with domestic insurers to report their activities as part of those affiliated entities, which is not included in the data reported by domestic insurers for state regulatory purposes, this only accounts for approximately 0.5 percent in additional TRIP-eligible lines premiums in a given year than would otherwise be reported to state regulators.

The premiums reported to Treasury in the 2017 and 2018 TRIP data calls compare to the premiums reported by non-small and small insurers for state regulatory purposes as detailed in Figure 3.

Figure 3: Comparison of TRIP-Eligible DEP Reported in Treasury Data Calls To TRIP-Eligible DEP Reported to State Regulators⁵⁴



Source: 2017 and 2018 TRIP data calls; S&P Global Market Intelligence as of June 1, 2018

The data provided by reporting insurers in the 2017 and 2018 TRIP data calls, to the extent it can be compared, is consistent with the more general information reported for state regulatory purposes. Therefore, it provides a sufficient basis upon which to analyze the effectiveness of the Program.

⁵⁴ In the 2017 Small Insurer Study, Treasury adjusted state reporting data to account for the premium differential between the TRIP-eligible lines of insurance and the state reporting lines. See FIO, *2017 Small Insurer Study*, 11.

V. ANALYSIS OF THE OVERALL EFFECTIVENESS OF THE PROGRAM

TRIA was established to “protect consumers by addressing market disruptions and ensure the continued widespread availability and affordability of property and casualty insurance for terrorism risk,” and to permit private markets to stabilize, resume pricing, and build capacity.⁵⁵ Based on Treasury’s analysis, the Program has been largely effective in meeting its statutory objectives. Terrorism risk insurance is now available in the market for a relatively low cost and is purchased by the majority of commercial policyholders in the United States. Private reinsurance capacity for terrorism risk insurance has increased since the creation of the Program. Stakeholders – including insurers, reinsurers, and commercial policyholders – also state the Program has been effective in achieving its statutory objectives.⁵⁶ Treasury addresses these issues in more detail below, relying upon the data it has collected.

The 2017 and 2018 TRIP data calls indicate that the market for P&C insurance in general and terrorism risk insurance in particular has been relatively stable, with insurance both affordable and available to U.S. policyholders. Commenters cited the Program as the principal mechanism that has made terrorism risk insurance available and affordable since the inception of the Program in 2002, and observed that the Program has had a stabilizing effect on the market for P&C insurance generally and terrorism risk insurance in particular.⁵⁷ One commenter also identified market fluctuations that have taken place in light of uncertainty over whether the Program would be reauthorized.⁵⁸

The Program mechanics – the amount of the Program Trigger, the individual insurer deductibles, and the co-pay shares – also have an impact upon how the market for terrorism risk insurance

⁵⁵ TRIA §101(b).

⁵⁶ See note 33 (identifying commenters).

⁵⁷ See NAIC Comments, 1 (“We believe that the presence of a federal partnership with the private insurance markets has provided a measure of security to the insurance industry by minimizing market disruptions and ensuring the widespread availability of property and casualty insurance for terrorism risks.”); AIA/NAMIC/PCI Comments, 3 (“TRIP has worked well to provide stability in the terrorism insurance market and to ensure that the industry is well positioned to meet the nation’s need for insurance coverage in the event of certified acts of terrorism.”); RAA Comments, 1 (“By limiting insurers’ exposure to catastrophic terrorism losses, TRIA has enhanced the private market for such coverage and has had a stabilizing influence on the economy.”); CIAB Comments, 3-4 (“Twenty-four of twenty-nine respondents believe that TRIP has not discouraged/impeded insurers from providing commercial P/C coverage or coverage for acts of terrorism. To the contrary, one respondent asserted that there would be no terrorism coverage without TRIP, and another said that having TRIP provides an ‘air support’ feeling to the private insurance market.”); CIAT Comments, 1 (“TRIP has been the key factor in ensuring that the private insurance market remained intact and has continued to meet the American economy’s needs in this respect largely through private risk capacity backstopped by this Program.”); VCIA Comments, 1 (“VCIA’s members would expect a significant market disruption if TRIA were not available.”).

⁵⁸ See NAR Comments, 2 (identifying the use of “springing exclusions” that would void coverage in the event TRIP was not reauthorized, which would have placed real estate owners at risk of default on account of requirements in financing agreements).

now operates. Some observed that the current mechanics may place too much risk in the private market, given the nature of the risk and the potential exposure,⁵⁹ although it was also recognized that these elements of the Program do not pose an impediment to participation in the market.⁶⁰

A. Availability of Terrorism Risk Insurance

The availability of insurance for terrorism risk refers to whether insurers offer coverage for losses arising from an act of terrorism. Even when insurers “make available” terrorism risk coverage as required by TRIA, they retain the ability to limit their terrorism risk exposure in various ways. For example, insurers can limit their exposure to terrorism risk through pricing mechanisms, by declining to underwrite particular risks, or by excluding coverage for certain forms of terrorism loss (where permitted by state law) such as for nuclear, biological, chemical, or radiological (NBCR) attacks. Insurers may also decline to write a particular line of insurance entirely if that line presents too great a risk of loss on account of terrorism.

In assessing whether participating insurers are complying with the “make available” requirement, this Report considers the specific experience indicated by the data calls for Commercial Multi-Peril (CMP) insurance. CMP insurance is a type of commercial package policy sold in the United States that contains coverage for more than one line of insurance in a single policy. Such insurance products are more typically purchased by smaller or medium-sized business entities,⁶¹ and they constitute a significant proportion (32 percent) of all policy premiums reported by non-small and small insurers in the TRIP-eligible lines of insurance, excluding workers’ compensation.⁶² The high take-up rate for these products by large numbers of commercial businesses indicates that participating insurers are regularly “making available” terrorism risk insurance to their policyholders. In the 2017 and 2018 TRIP data calls, 79 percent and 80 percent, respectively, of CMP policies (as measured by TRIP-eligible DEP) included coverage for terrorism risk, with high percentages observed in all geographic areas of the United States.⁶³

⁵⁹ See AIA/NAMIC/PCI Comments, 2 (stating that TRIA reauthorizations “have not worked to stimulate private market growth,” noting the “mistaken belief that simply increasing the financial responsibility placed on insurers will force private market growth.”).

⁶⁰ See Lloyd’s Comments, 2 (while noting there is “room for debate” concerning the Program mechanics as currently set, and that the mechanics if set too high “might have a chilling effect on certain insurers’ willingness to write terrorism cover,” concluding that “these elements themselves do not pose any structural impediments to market participation”).

⁶¹ Policies that package together multiple lines typically needed by small businesses are generally more cost effective for such businesses than purchasing separate policies for each line of insurance. See generally “Understanding Business Owners Policies (BOPs),” Insurance Information Institute, <https://www.iii.org/article/understanding-business-owners-policies-bops>.

⁶² Availability issues in connection with workers’ compensation are addressed separately in Section VII.

⁶³ Using policy count data reported by non-small insurers (such information is not collected from small insurers), the take-up rate for terrorism risk insurance in commercial multi-peril lines increased to 91 percent (in the 2018 TRIP data call) and 89 percent (in the 2017 TRIP data call), respectively. See also Section V.C.

In addition, commenters representing the consumers of terrorism risk insurance generally acknowledge the availability of the insurance within the marketplace.⁶⁴

The take-up rate for terrorism risk coverage in workers' compensation is 100 percent because all jurisdictions require that it be provided as part of all workers' compensation policies. Accordingly, assessing "availability" in the workers' compensation market is perhaps best considered by reference to shifts between the voluntary and residual markets, as well as the percentage of policyholders that elect to self-insure workers' compensation risks.

If any business is unable to obtain a workers' compensation policy in the "voluntary" insurance market from a licensed insurance company, then it must instead purchase insurance in the "residual" market (in which insurance must be provided) or qualify as a self-insurer for workers' compensation purposes. State insurance laws require licensed insurance companies to participate in residual insurance markets through risk-sharing arrangements that vary from state to state. Policies purchased in the residual market are generally characterized by higher risks and higher premiums. In situations where the residual market share is large or growing it may indicate market stress or inefficiency and may put commensurate pressure on insurers in the voluntary market that are required to assume a large or growing share of risk through involuntary policy writing.⁶⁵

Since the enactment of TRIA, the residual market share of total workers' compensation premiums has been stable, ranging between 4 to 6 percent of total workers' compensation premiums between 2007 and 2017.⁶⁶ Similarly, the percentage of policyholders self-insuring in the workers' compensation market has remained constant between 23.9 percent in 2007 and 24.5 percent in 2015.⁶⁷ Accordingly, in the specific context of workers' compensation insurance, terrorism risk insurance is generally available in the marketplace.

⁶⁴ See, e.g., CIAT Comments, 2 ("Because of TRIA, it has been possible for businesses to purchase terrorism risk coverage continuously since its enactment."); NAR Comments, 1 ("Since its reauthorization in January 2015, NAR members have not reported any difficulties for themselves or their clients in obtaining terrorism risk insurance policies, and studies have found that more than 60% of American businesses have terrorism coverage, a testament to the program's effectiveness.").

⁶⁵ See NCCI Comments, 2-3 (noting impact of the September 11 attacks on the increase in the share of the residual market for workers' compensation risks and follow-on impact on insurers in the voluntary market). Workers' compensation issues under TRIA are discussed in Section VII.

⁶⁶ NCCI Comments, 3.

⁶⁷ See National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs - 2015 Data* (October 2017), 17, <https://www.nasi.org/research/2017/report-workers%E2%80%99-compensation-benefits-coverage-costs-%E2%80%93-2015>.

B. Affordability of Terrorism Risk Insurance

Terrorism risk coverage provided under TRIP is generally “embedded” in policies that also cover other risks. Coverage also may be provided on a “standalone” basis where the policy provides coverage only for terrorism risk. Such standalone policies generally are used when properties or operations present heightened exposure to terrorism risk.

Approximately 80 percent of the U.S. terrorism risk insurance market (as measured by terrorism risk insurance DEP) is comprised of embedded policies, while the remaining 20 percent is comprised of standalone terrorism policies. However, the amount of risk covered under embedded policies, as measured by policy limits of liability, is far greater than the limits of liability under standalone policies.

1. Embedded Terrorism Risk Insurance

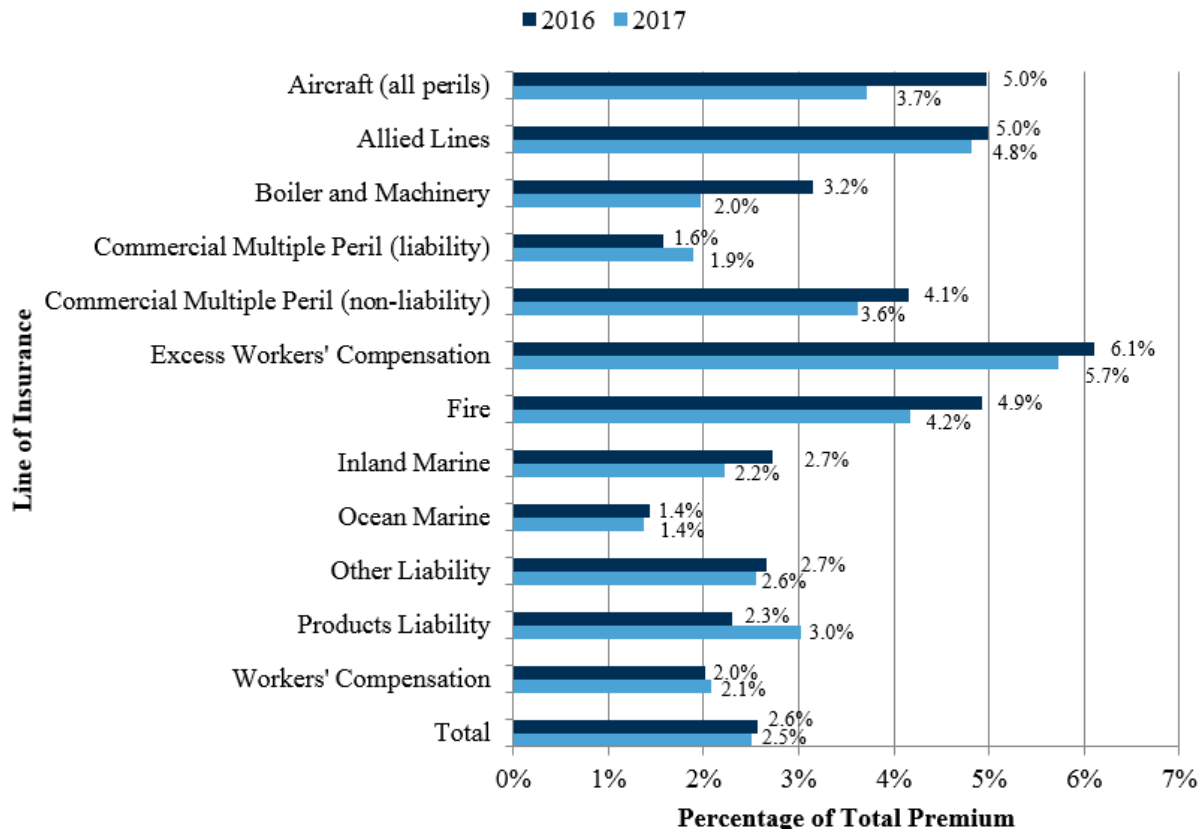
Embedded terrorism risk insurance is provided within P&C policies that also cover other risks. TRIA requires that insurers disclose to policyholders the amount of premium charged for embedded terrorism risk insurance.⁶⁸ This premium can be expressed to the policyholder as a percentage of the total premium charged for the policy. Similarly, analyses of terrorism risk insurance also typically express the cost of terrorism risk insurance as a percentage of the 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.

Although approximately 70 percent of insurers charge a premium for terrorism risk insurance within embedded policies, approximately 30 percent provide terrorism risk coverage for no additional charge. Figure 4 illustrates premium charges in the terrorism risk insurance marketplace for embedded terrorism risk insurance coverage on a line-by-line basis and overall when a charge is made for the insurance.⁶⁹

⁶⁸ See General Disclosure Requirements, 31 C.F.R. § 50.10 (2018); Clear and Conspicuous Disclosures, 31 C.F.R. § 50.12 (2018).

⁶⁹ The figures in this section are based upon the information reported to Treasury by non-small and small insurers. Similar information for captive and alien surplus lines insurers is reported in Sections VI.B and VI.C, respectively.

Figure 4: Percentage of Total Policy DEP Allocated to Terrorism Risk⁷⁰

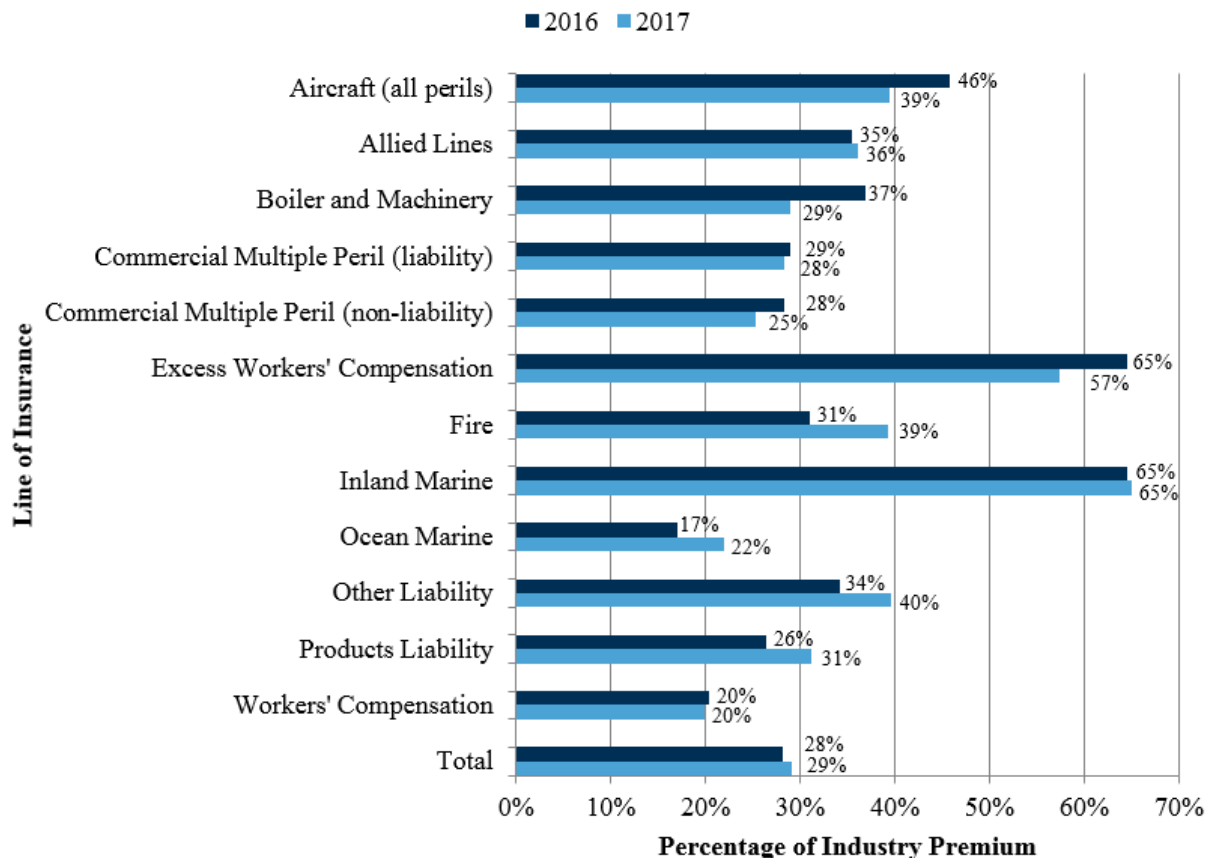


Source: 2017 and 2018 TRIP data calls

⁷⁰ The premiums for embedded terrorism risk insurance are slightly overstated because total premiums contain a small amount of premium for standalone policies that cannot be removed on a line-by-line basis. When removed from the total figures, however, the total cost declines by only a few hundredths of a percentage point, and remains at 3.0 percent in 2016 and 2.5 percent in 2017.

Figure 5 identifies policies where terrorism risk coverage is provided for no additional charge.

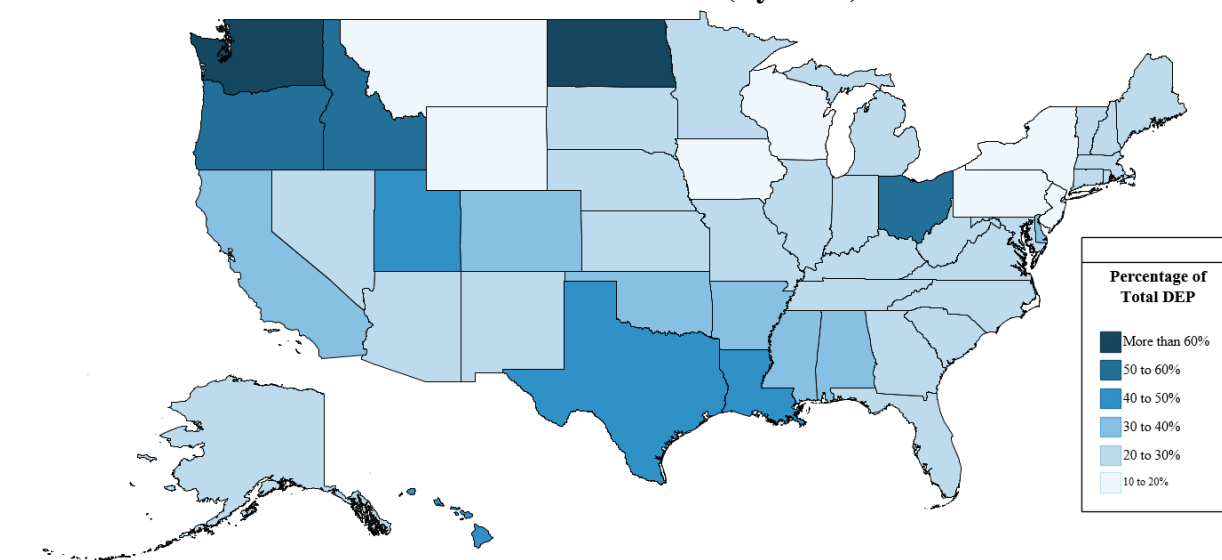
Figure 5: Percentage of DEP Where Policies Include Terrorism Coverage At No Additional Cost (By Line of Insurance)



Source: 2017 and 2018 TRIP data calls

Figure 10 illustrates where terrorism risk insurance was provided for no additional charge by state.

Figure 10: 2017 Percentage of DEP Where Policies Include Terrorism Coverage At No Additional Cost (By State)

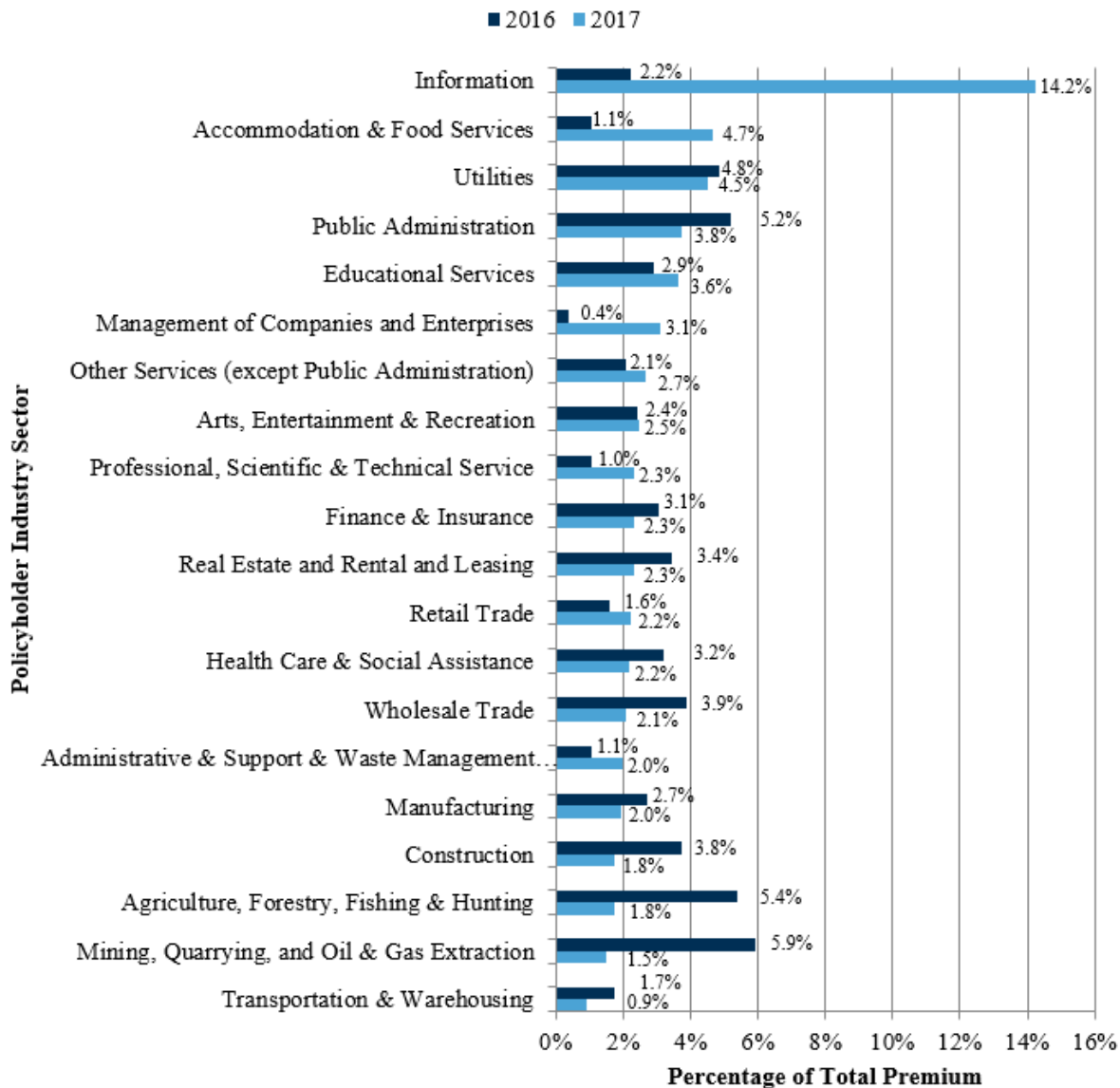


Source: 2018 TRIP data call

Charges for terrorism risk insurance also vary by the policyholder's industry sector. Figure 11 illustrates the policyholder industry sectors of terrorism risk insurance premiums as a percentage of total insurance premiums, as reported by non-small and alien surplus line insurers.⁷¹

⁷¹ Policyholder industry code data was not requested from small insurers. Industry code data for policyholders insured by captive insurers is provided in Section VI.B.

Figure 11: Percentage of Total Policy DEP Allocated to Terrorism Risk For Non-Small and Alien Surplus Lines Insurers (By Policyholder Industry Sector)



Source: 2017 and 2018 TRIP data calls

The data from the 2017 and 2018 TRIP data calls demonstrates that terrorism risk insurance provided on an “embedded” basis is priced at a relatively small percentage of the total premium charged for the policy, ranging from 2.5 to 3.0 percent on average when a charge is made. Additionally, approximately 30 percent of the time, as measured by DEP, terrorism risk insurance is provided for no additional charge. Charges for terrorism risk insurance do vary to some extent by line of insurance, geographic area, and the policyholder’s industry sector.

2. Standalone Terrorism Risk Insurance

Standalone terrorism risk insurance only provides coverage for losses arising from terrorism, unlike embedded terrorism risk insurance. Standalone coverage

is purchased primarily by organizations that are viewed by insurers as being at high risk of loss due to terrorism in one of the following situations: when terrorism coverage is not available as part of the commercial property policy, when the price of terrorism coverage from the insurer providing the commercial property policy is too high, or when the terrorism coverage offered by the insurer providing the commercial property policy is too narrow.⁷²

Standalone terrorism coverage can be provided either through “certified” standalone terrorism risk policies which are 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 insure terrorism-related losses (as defined in the specific policy) regardless of whether the Secretary has certified an act of terrorism under TRIA.⁷³ Any losses paid by insurers under non-certified standalone terrorism risk policies would not be eligible for reimbursement under TRIP.

⁷² “Stand Alone Terrorism Coverage,” International Risk Management Institute, <https://www.irmi.com/online/insurance-glossary/terms/s/stand-alone-terrorism-coverage.aspx>.

⁷³ Such “non-certified standalone terrorism” policies, in addition to insuring losses to 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, <http://www.propertycasualty360.com/2017/01/31/7-reasons-to-consider-a-stand-alone-terrorism-poli>; CIAT Comments, 2-3.

As shown in Figure 12, direct earned premiums under non-certified standalone terrorism risk insurance policies were much lower, for most insurer categories, than total premiums earned under certified standalone policies. Only alien surplus lines insurers reported earning a majority of their premiums for standalone terrorism risk insurance policies under non-certified policies.

Figure 12: Percentage of Standalone Policies That are Certified Versus Non-Certified (By DEP)

	Certified Policies		Non-Certified Policies	
	2016	2017	2016	2017
Alien Surplus Lines Insurers	22.4%	39.0%	77.6%	61.0%
Captive Insurers	95.3%	95.3%	4.6%	4.7%
Non-Small Insurers	69.0%	48.0%	30.3%	52.0%
Small Insurers ⁷⁴	N/A	77.4%	N/A	22.6%
All Insurer Categories	83.9%	80.0%	16.0%	20.0%

Source: 2017 and 2018 TRIP data calls

The data also suggests that standalone terrorism policies in each insurer category vary significantly in terms of cost and whether they provide coverage under TRIA. Figure 13 illustrates the average cost for standalone terrorism policies, by insurer category, depending on upon whether certified or non-certified coverage is provided.

Figure 13: 2017 Certified Standalone 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	3,262	\$ 78,162,288	\$ 23,961	2,810	\$122,059,656	\$ 43,438
Captive Insurers	337	636,055,611	1,887,405	12	31,263,364	2,605,280
Non-Small Insurers	4,223	30,497,344	7,222	2,188	33,038,374	15,100
Small Insurers	14	69,173	4,941	8	20,230	2,529

Source: 2018 TRIP data call

The 2016 and 2017 TRIP data calls did not request information on the total coverage (i.e., policy limits) provided under non-certified standalone policies, and the disparity in average policy cost between certified and non-certified policies may be due to differences in the relative size or nature of exposures covered under each type of policy. However, the disparity could also indicate a higher cost associated with non-certified standalone policies compared to certified standalone policies.⁷⁵ Treasury cannot determine, based upon the data, the extent to which the

⁷⁴ Treasury did not require small insurers to provide information concerning standalone terrorism policies during the 2017 TRIP data call, although it did in connection with the 2018 TRIP data call.

⁷⁵ Some commenters stated that without the support offered by the Program in connection with exposures covered by the Program, the ability of insurers to offer coverage on a non-certified basis outside the scope of TRIP could be further limited, and could not substitute for the support provided by the Program. *See* CIAT Comments, 3; Lloyd's Comments, 3.

cost difference is due to the lack of federal support for non-certified policies, higher policy limits under non-certified policies, a combination of these factors, or other considerations. Treasury will continue to monitor and assess these issues in its ongoing TRIA work.

Certified standalone terrorism risk insurance policies, which do provide TRIA coverage, account for approximately one-fifth of all terrorism risk insurance DEP subject to the Program (17 percent in 2016 and 20.5 percent in 2017), with the other 80 percent earned through embedded policies. However, the cost of coverage under certified standalone policies is also significantly higher than the cost of coverage under embedded policies. Measured by the limits of liability of all policies insuring terrorism risk under the Program, certified standalone policies accounted for less than 0.5 percent of total policy limits in both 2016 and 2017.

Figure 14 shows the amount of premium charged per \$1 million in coverage under embedded policies compared to standalone policies covering TRIA-certified events.

**Figure 14: Embedded Policies versus Certified Standalone Policies:
Premium Charged Per \$1 Million in Policy Limits**

	Embedded Terrorism		Standalone Terrorism	
	2016	2017	2016	2017
Alien Surplus Lines Insurers	\$ 29	\$ 127	\$ 122	\$ 183
Captive Insurers	\$ 915	\$ 1,300	\$ 1,641	\$ 1,464
Non-Small Insurers	\$ 4	\$ 8	\$ 1,059	\$ 572
Small Insurers	\$ 9	\$ 5	N/A	\$ 339
All Insurer Categories	\$ 6	\$ 13	\$ 1,115	\$ 813

Source: 2017 and 2018 TRIP data calls

As noted above, the data indicates that the rate charged for terrorism coverage under embedded policies is typically lower than the rate charged for standalone policies. This indicates that standalone policies are more likely to be issued in situations with a higher risk of terrorism.

C. Take-Up Rates for Terrorism Risk Insurance

TRIA requires an offer – but does not mandate the purchase – of terrorism risk insurance.⁷⁶ Therefore, the extent to which terrorism risk insurance is purchased by policyholders (the take-up rate) may approximate the distribution of insured payments in the event of a terrorist attack. A higher take-up rate means that the losses arising from a terrorist attack will be more likely to be covered by private insurers.

A take-up rate based on the number of policies will be likely influenced by the large number of small policies covering risks with lower insured values. Alternatively, a take-up rate measured

⁷⁶The take-up rate data discussed in this section do not consider workers' compensation, which has a 100 percent take-up rate as a matter of state law. Section VII discusses the impact of the Program on workers' compensation insurers.

by DEP or policy limits will be more influenced by policies covering larger businesses with more insured property and liability exposure. The latter comes closer to reflecting the amount of insured business activity in the economy.

Prior analyses by Treasury found that the take-up rate, when measured by the percentage of policies containing terrorism coverage, increased from 27 percent in 2003 (the first full year of the Program) to approximately 60 percent by 2006.⁷⁷ In a more recent study using partial 2015 data, Treasury found the take-up rate to be even higher, ranging from approximately 70 percent to 80 percent depending upon whether it was measured by policy count, DEP, or insured values.⁷⁸

Figure 15 illustrates the take-up rates in 2016 by policy count, DEP, and policy property and liability limits. Information is based upon non-small, small, and alien surplus lines insurer reported data.⁷⁹

**Figure 15: 2016 Terrorism Risk Insurance Take-Up Rates
By Policy Count, DEP, and Policy Limits (By Insurer Category)**

	Policy Count	DEP	Property Limits	Liability Limits
Alien Surplus Lines Insurers	20%	33%	50%	60%
Non-Small Insurers	76%	64%	83%	84%
Small Insurers ⁸⁰	N/A	55%	49%	60%
All Insurer Categories	75%	61%	81%	83%

Source: 2017 TRIP data call

⁷⁷ Office of Economic Policy, U.S. Department of the Treasury, *Assessment: The Terrorism Risk Insurance Act of 2002* (2005), 3, 84, https://www.treasury.gov/resource-center/fin-mkts/Documents/tria_studyby_treas.pdf; President's Working Group on Financial Markets (PWG), *2006 Terrorism Risk Insurance* (2006), 42-44; PWG, *Market Conditions for Terrorism Risk Insurance 2010* (2010), 23, <https://www.treasury.gov/resource-center/fin-mkts/Documents/PWG%20Report%20Final%20January%2013.pdf>; PWG, *The Long-Term Availability and Affordability of Insurance for Terrorism Risk* (2014), 30, https://www.treasury.gov/resource-center/fin-mkts/Documents/PWG_Terrorism_2014.pdf.

⁷⁸ FIO, *2016 Effectiveness Report*, 14-15.

⁷⁹ Captive insurers do not present similar issues to admitted insurers with respect to take-up rates, because the decision of a captive owner to insure its terrorism risk exposure with a captive insurer is a self-insurance decision as opposed to a market decision (although the cost of terrorism risk insurance in the marketplace at large may influence to decision to self-insure through a captive insurer). The captive insurance market for terrorism risk insurance is addressed in Section VI.B.

⁸⁰ Treasury did not require small insurers to provide policy count information in the 2017 TRIP data call.

Figure 16 illustrates the take-up rates in 2017 by policy count, DEP, and policy property and liability limits; and for non-small, small, and alien surplus lines insurers.

**Figure 16: 2017 Terrorism Risk Insurance Take-Up Rates
By Policy Count, DEP, and Policy Limits (By Insurer Category)**

	Policy Count	DEP	Property Limits	Liability Limits
Alien Surplus Lines Insurers	17%	40%	30%	68%
Non-Small Insurers	79%	66%	72%	69%
Small Insurers ⁸¹	N/A	55%	74%	43%
All Insurer Categories	78%	63%	72%	62%

Source: 2018 TRIP data call

The results shown in Figures 15 and 16 are generally consistent with similar figures cited by stakeholders.⁸²

Similar to the price of terrorism risk insurance, the take-up rate of terrorism risk insurance also varies by the geographic region of the United States, and by state. Figure 17 shows the take-up rates indicated for the Northeast, Midwest, South, and West regions, using the same benchmarks of policy count, DEP, and insured value, for 2016.

**Figure 17: 2016 Terrorism Risk Insurance Take-Up Rates
By Policy Count, DEP, and Insured Value (By Region)**

	Policy Count	DEP	Property Limits	Liability Limits
Northeast	73%	66%	84%	84%
Midwest	80%	64%	81%	80%
South	71%	58%	81%	84%
West	77%	60%	79%	81%
All Regions	75%	61%	81%	83%

Source: 2017 TRIP data call

Figure 18 shows the 2017 take-up rates using the same metrics.

**Figure 18: 2017 Terrorism Risk Insurance Take-Up Rates
By Policy Count, DEP, and Insured Value (By Region)**

	Policy Count	DEP	Property Limits	Liability Limits
Northeast	74%	67%	72%	78%
Midwest	82%	66%	82%	76%
South	76%	61%	69%	62%
West	82%	62%	63%	43%
All Regions	78%	63%	72%	62%

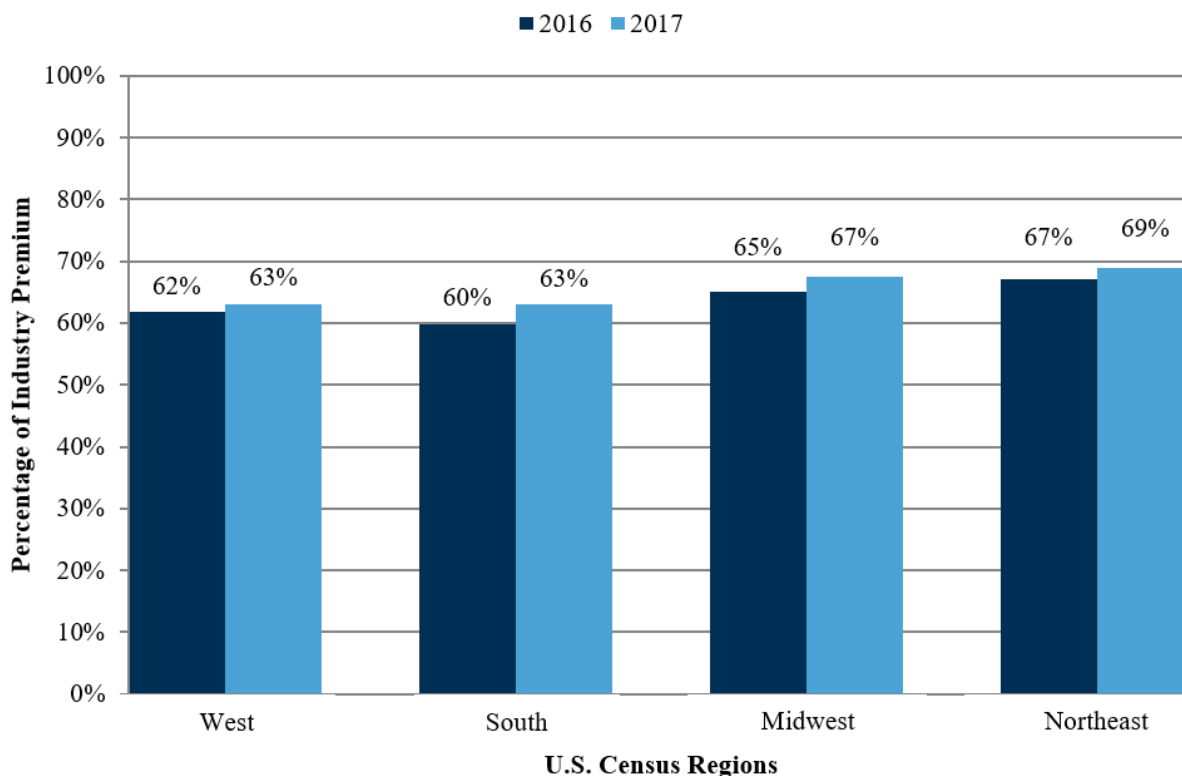
Source: 2018 TRIP data call

⁸¹ Treasury did not require small insurers to provide policy count information in the 2018 TRIP data call.

⁸² See Marsh Comments, 4 (reflecting 2016 and 2017 take-up rates of 63 percent and 62 percent, respectively).

Figure 19 illustrates take-up rates, based upon DEP, by region (for both 2016 and 2017). Variations in take-up rates by geographic area are consistent with those reflected by other sources.⁸³

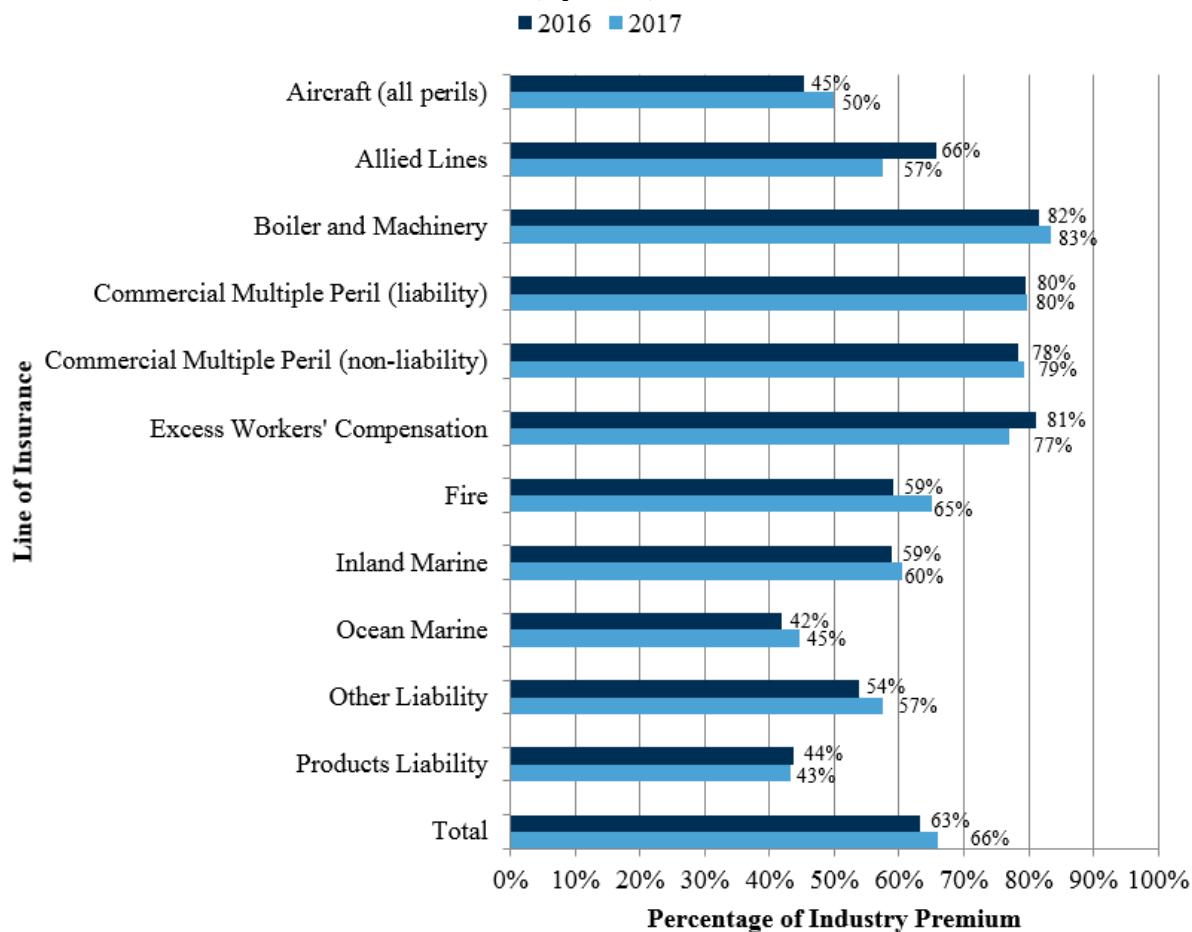
Figure 19: Terrorism Risk Insurance Take-Up Rates By DEP (By Region)



Source: 2017 and 2018 TRIP data calls

⁸³ See Marsh Comments, 9 (reflecting take-up rates of 73 percent in the Northeast, 59 percent in the Midwest, 58 percent in the South, and 54 percent in the West). As is the case with Treasury's other analyses by Region, the information illustrated is based upon non-small and small insurer reporting only.

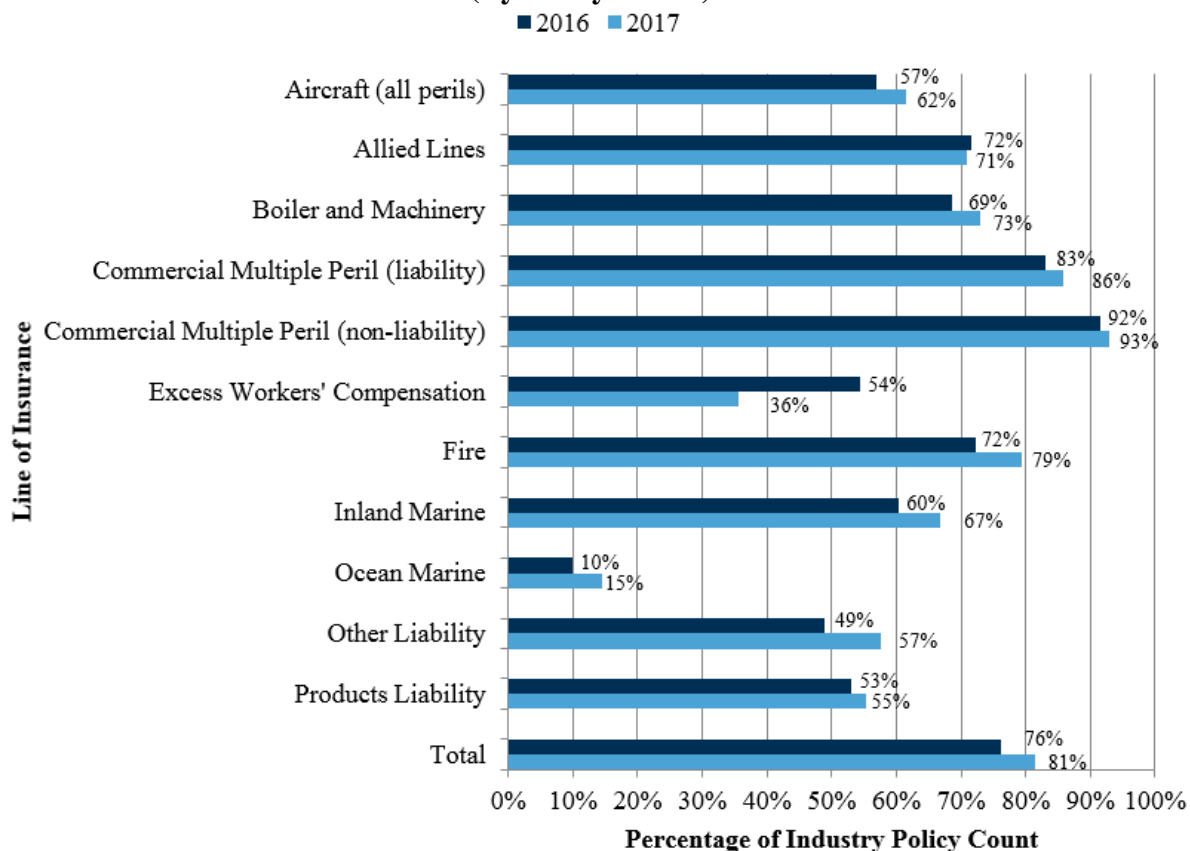
Figure 21: Terrorism Risk Insurance Take-Up Rates in TRIP-Eligible Lines (By DEP)



Source: 2017 and 2018 TRIP data calls

Figure 22 shows the take-up rate by policy count.

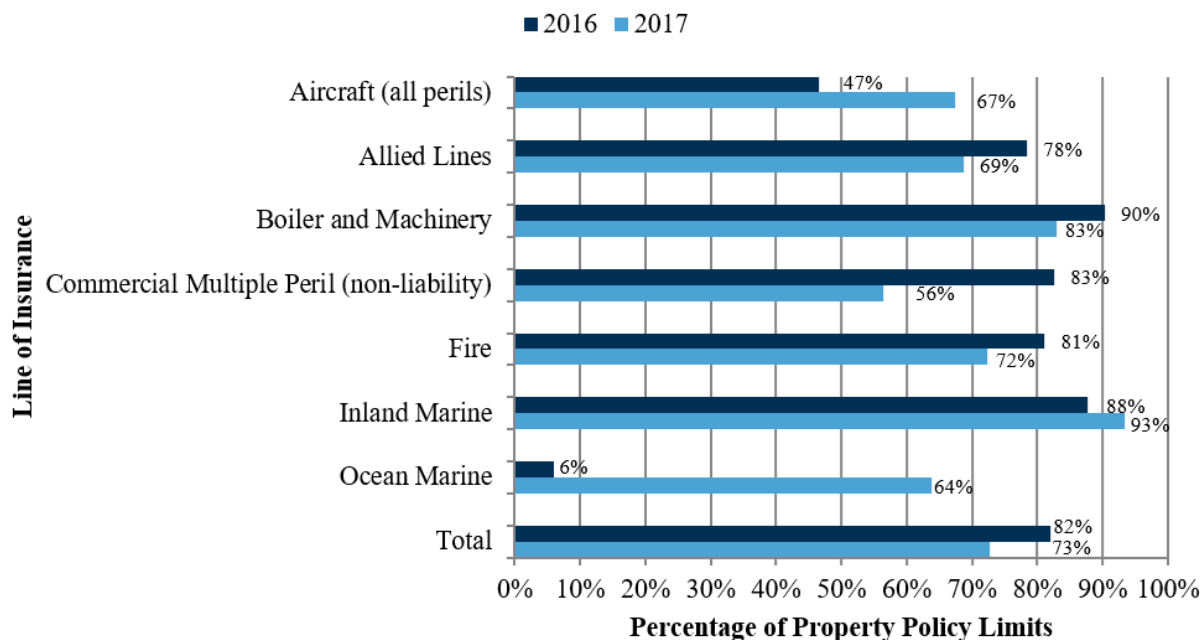
**Figure 22: Terrorism Risk Insurance Take-Up Rates in TRIP-Eligible Lines
(By Policy Count)**



Source: 2017 and 2018 TRIP data calls

Figure 23 shows the take-up rate in TRIP-eligible property lines by property policy limits.

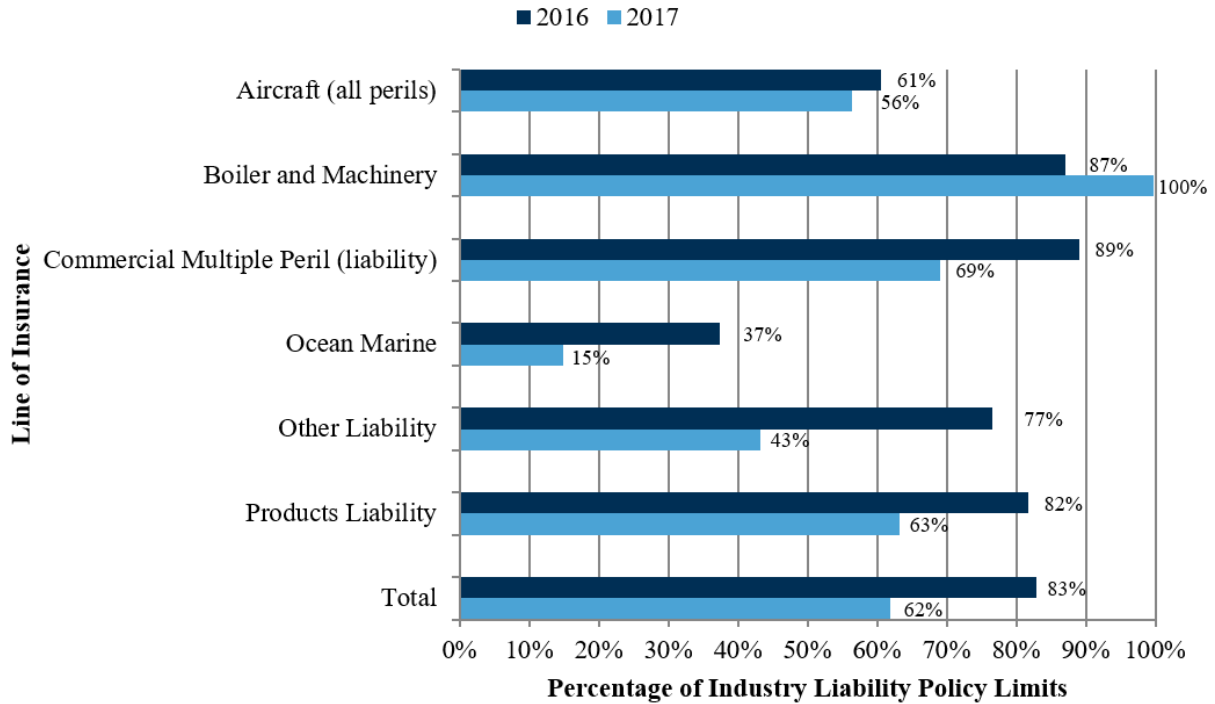
**Figure 23: Terrorism Risk Insurance Take-Up Rates in TRIP-Eligible Lines
(By Property Policy Limits)**



Source: 2017 and 2018 TRIP data calls

Figure 24 shows the take-up rate in TRIP-eligible lines by liability policy limits.

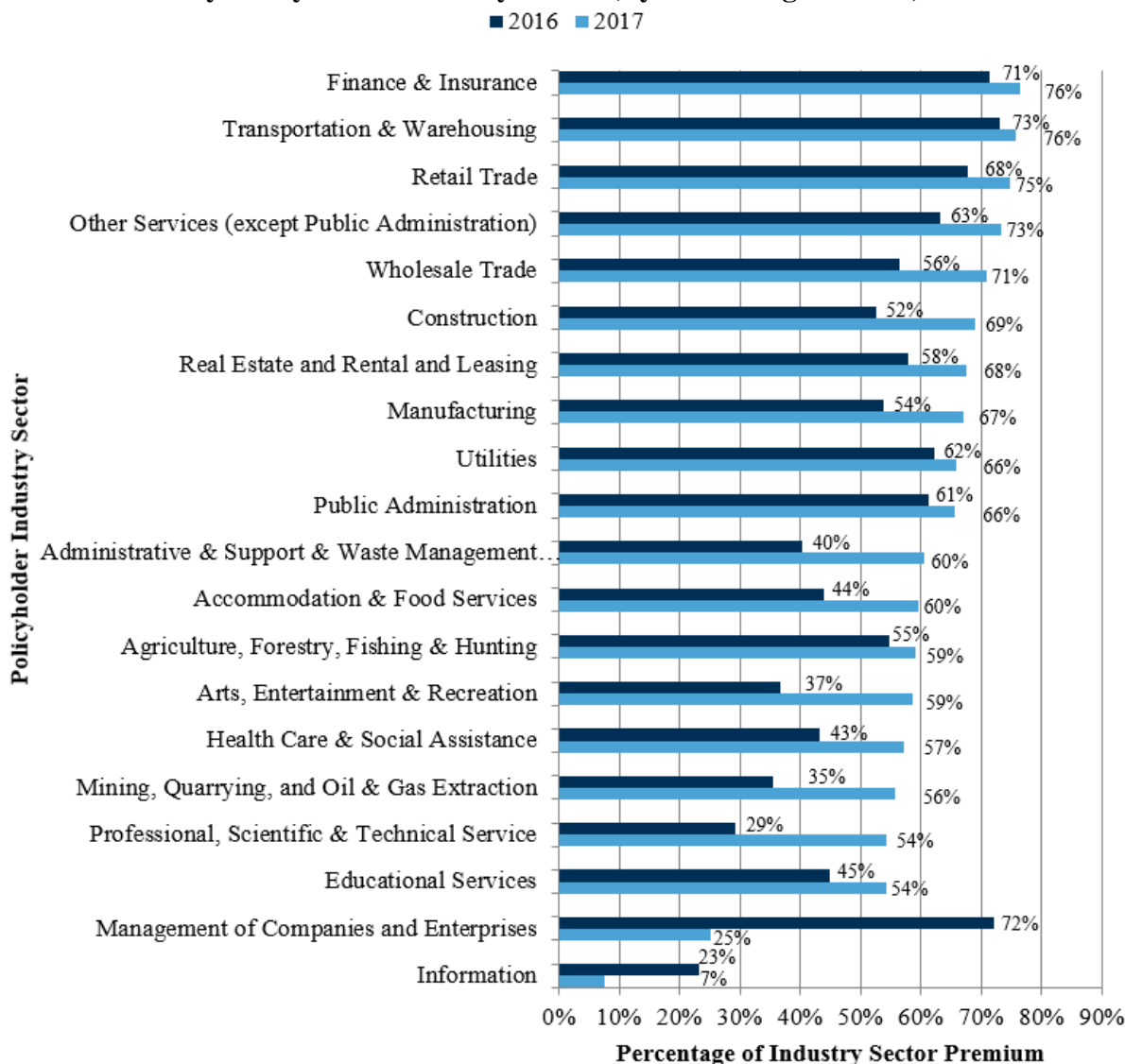
**Figure 24: Terrorism Risk Insurance Take-Up Rates in TRIP-Eligible Lines
(By Liability Policy Limits)**



Source: 2017 and 2018 TRIP data calls

Take-up rates also vary by policyholder industry sector, as illustrated by Figure 25.

**Figure 25: Terrorism Risk Insurance Take-Up Rates
By Policyholder Industry Sector (By TRIP-Eligible DEP)⁸⁵**



Source: 2017 and 2018 TRIP data calls

⁸⁵ Data provided for non-small and alien surplus lines insurers. Small insurers were not required to report policyholder industry sector information in the 2018 TRIP data call. Take-up rates for captive insurers were not analyzed because the decisions of a captive owner to self-insure through a captive insurer is different from the decision whether to purchase terrorism risk insurance in the market generally. See note 79.

While other sources reporting this information do not use the same policyholder sector descriptions as Treasury, their data reflects a similar variance in take-up rates by policyholder industry sectors, particularly where the sector descriptions are comparable.⁸⁶

Treasury also requested more specific data from non-small, alien surplus lines, and captive insurers concerning risk exposures in 26 specific metropolitan areas.⁸⁷ This information addressed, among other things, the policy property limits assumed by each reporting insurer that are subject to (and not subject to) the Program (because terrorism risk insurance was not obtained). In the 2017 or 2018 TRIP data call, 80 percent or more of the reported policy exposures were identified with a particular geographic region.⁸⁸ Furthermore, the results obtained for each metropolitan area show that, with some exceptions, the aggregate policy property limits are proportional to gross domestic product (GDP) in most metropolitan areas.⁸⁹ Figure 26 illustrates the combined results obtained from the 2017 and 2018 TRIP data calls.

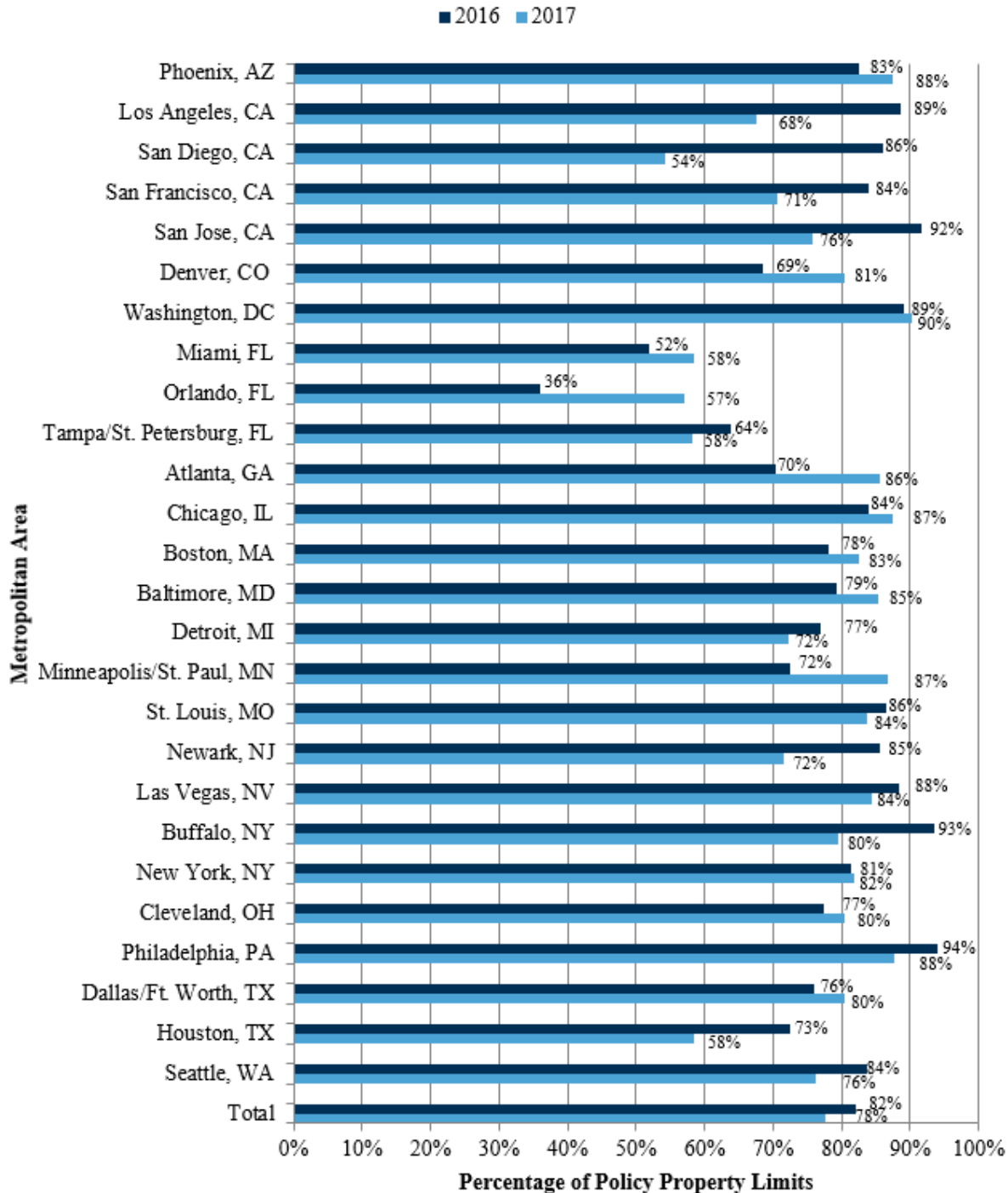
⁸⁶ See Marsh Comments, 6 (attributing varying take-up rates to the different concentration risks posed by different industries).

⁸⁷ The metropolitan areas identified are identical to those utilized by A.M. Best when considering the terrorism risk exposures of the companies it evaluates.

⁸⁸ Reporting insurers were permitted to identify premiums by geographic region in an “Unknown” category, indicating that the policy exposure could not be retrieved by geographic location. Approximately 18 percent of the total property exposure was reported in the Unknown category in the 2017 TRIP data call. This amount declined to approximately 14 percent in the 2018 TRIP data call.

⁸⁹ As determined by the Bureau of Economic Analysis. See “Regional Data,” Bureau of Economic Analysis <https://www.bea.gov/iTable/iTableHtml.cfm?reqid=70&step=1&isuri=1>.

**Figure 26: Terrorism Risk Insurance Take-Up Rates by Metropolitan Area
(By Policy Property Limits)**



Source: 2017 and 2018 TRIP data calls

Take-up rates by property exposure for all other areas in the United States (a figure requested separately for all other areas, where the exposure was allocated) was reported to be 78.5 percent in 2016 and 76.8 percent in 2017 – figures comparable to the indicated figures for all metropolitan areas combined (82.0 percent in 2016 and 74.8 percent in 2017).⁹⁰ The exposure that is covered under the Program in all other areas in the United States is significant and exceeds the total property limits covered in the 26 metropolitan areas. Based upon the results of the data calls, 68.6 percent of all property exposures reported to be insured under the Program fell within the “all other locations in the United States” category in 2016 versus 31.4 percent in the identified metropolitan areas. In 2017, the reported figures were the same – 68.6 percent and 31.4 percent, respectively.

D. Private Reinsurance Availability

To the extent it is available and purchased by insurers writing terrorism risk insurance, private reinsurance may serve both to increase the availability of terrorism risk insurance and to reduce or minimize Program exposure. Reinsurance mechanisms support the proper functioning of insurance markets, and Treasury has evaluated in prior reports the amount of reinsurance capacity for terrorism risk since the enactment of TRIA. In its 2006, 2010, and 2014 analyses, Treasury found that such capacity was limited and had remained relatively static since shortly after the September 11 attacks.⁹¹ In connection with Treasury’s recent TRIP data calls, however, more reinsurance capacity for terrorism risk has been observed,⁹² which is consistent with the observations of commenters that reinsurers may now have a greater willingness to cover conventional (i.e., non-NBCR) terrorism risks than was indicated by these prior analyses.⁹³

In recent years, the reinsurance market in the United States has generally been characterized by large amounts of capacity for P&C business, and a resulting decline in prices as reinsurers seek

⁹⁰ Based upon the voluntary data call collecting CY 2015 information, the property exposure data also reflected take-up rates that were comparable for metropolitan areas combined (71.9 percent) versus all other locations in the United States combined (73.3 percent). See FIO, *2016 Effectiveness Report*, 15-16.

⁹¹ See PWG, *2006 Terrorism Risk Insurance Report*, 26 (\$6-\$8 billion of terrorism reinsurance capacity in 2006, \$4-6 billion in 2005), PWG, *2010 Market Conditions Report*, 19 (between \$6-8 billion to \$8-10 billion); and PWG, *2014 Availability and Affordability Report*, 19 (\$6-8 billion).

⁹² Treasury’s 2016 Effectiveness Report, based upon partial industry data collected by Treasury that year, noted that a subset of responding insurers reported a total of \$21.4 billion in reinsurance coverage for a single loss resulting from terrorism. Based on other reported information, approximately 82 percent of that \$21.4 billion amount fell within the co-pay obligations of the reporting insurers above their Program deductibles, with the remaining balance falling within the insurer’s TRIP deductible. FIO, *2016 Effectiveness Report*, 18.

⁹³ See RAA Comments, 3 (“Reinsurers have been willing to put a defined amount of capital at risk for terrorism-related losses due to the nature of the risk, insurer demand for risk transfer and the price they are willing to pay. In 2017 . . . the combined property and workers’ compensation private conventional-only terrorism reinsurance capacity was estimated to be \$2.5 billion per cedent program.”); Marsh Comments, 17 (reporting on per program limits and noting further limitations on reinsurance coverage that extends to NBCR exposures).

to place business.⁹⁴ Capacity has also been augmented by significant competition from alternative risk mechanisms such as insurance-linked securities, although to date there has not been significant investor interest in insurance-linked securities with terrorism risk exposure.⁹⁵ Many reinsurers have been increasingly willing to offer reinsurance coverage for conventional terrorism risk as part of ceding insurers' catastrophic risk reinsurance programs otherwise principally devoted to natural catastrophe risks.⁹⁶ While this development means that a larger amount of terrorism risk reinsurance is available to potentially satisfy losses, it also makes those same reinsurance limits subject to erosion or exhaustion on account of non-terrorism related claims, such as hurricane losses.

The data reported to Treasury, applicable to 2016 and 2017, supports the observation that many insurers are obtaining terrorism risk reinsurance in connection with reinsurance placements for natural catastrophe risks. However, the total amount of purchased reinsurance that will respond to terrorism risk continues to lag behind the amount of reinsurance purchased for natural catastrophe risks. For comparison purposes, Treasury requested information about the reinsurance contract terms (i.e., amount of coverage, attachment point, and co-participation share) for treaties covering terrorism risk and natural catastrophe risk. Figure 27 identifies the total amounts of per loss terrorism risk reinsurance purchased by responding insurers that will cover losses subject to the Program.⁹⁷

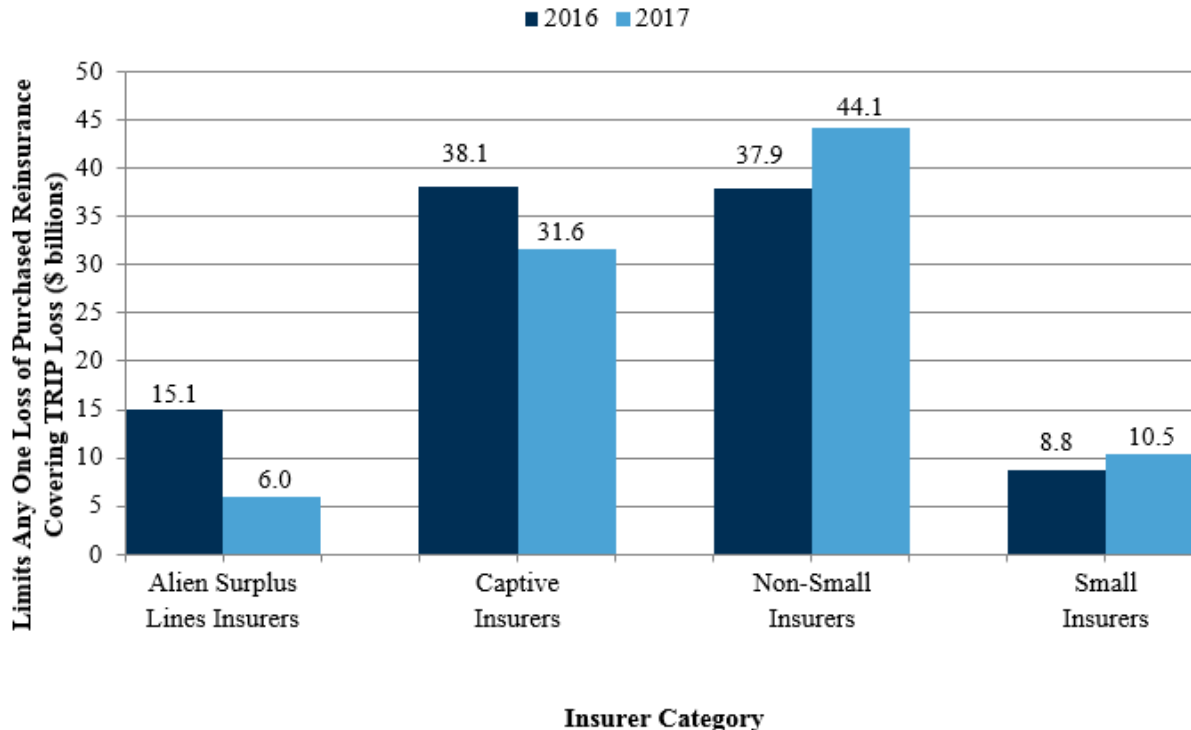
⁹⁴ See, e.g., Guy Carpenter, "Guy Carpenter Reports Moderating Reinsurance Pricing Decline at January 1, 2017 Renewals," news release, January 5, 2017, <http://www.guycarp.com/content/dam/guycarp/en/documents/PressRelease/2017/Guy%20Carpenter%20Reports%20Moderating%20Reinsurance%20Pricing%20Decline%20at%20January%201%202017%20Renewals.pdf>; Guy Carpenter, "Guy Carpenter Reports Capital Growth and Market Resilience Despite 2017 Losses," news release, January 18, 2018, <http://www.guycarp.com/content/dam/guycarp/en/documents/PressRelease/2018/Guy%20Carpenter%20Reports%20Capital%20Growth%20and%20Market%20Resilience%20Despite%202017%20Losses.pdf>. See also CIAB Comments, 2 (noting that "there is abundant risk transfer capacity in the form of excess traditional and nontraditional capital and competition remains high in the market," although also observing that "today's environment includes a different threat landscape with higher natural catastrophe, cyber security and political risks that were not as prevalent when TRIP was addressed in 2015").

⁹⁵ See AIA/NAMIC/PCI Comments, 9.

⁹⁶ Marsh Comments, 15; RAA Comments, 2-3.

⁹⁷ Treasury sets forth the total amounts of per loss limits purchased by responding insurers as a measure of total market capacity. On an individual basis, industry sources state that reinsurance capacity for conventional terrorism losses is approximately \$2.5 billion per cedent program. See Marsh Comments, 17. This is generally consistent with the information reported to Treasury, although a small number of insurers in both the 2017 and 2018 TRIP data calls reported total per loss limits in excess of this estimate.

Figure 27: Total Per Loss Reinsurance Limits Purchased for Losses Subject to TRIP

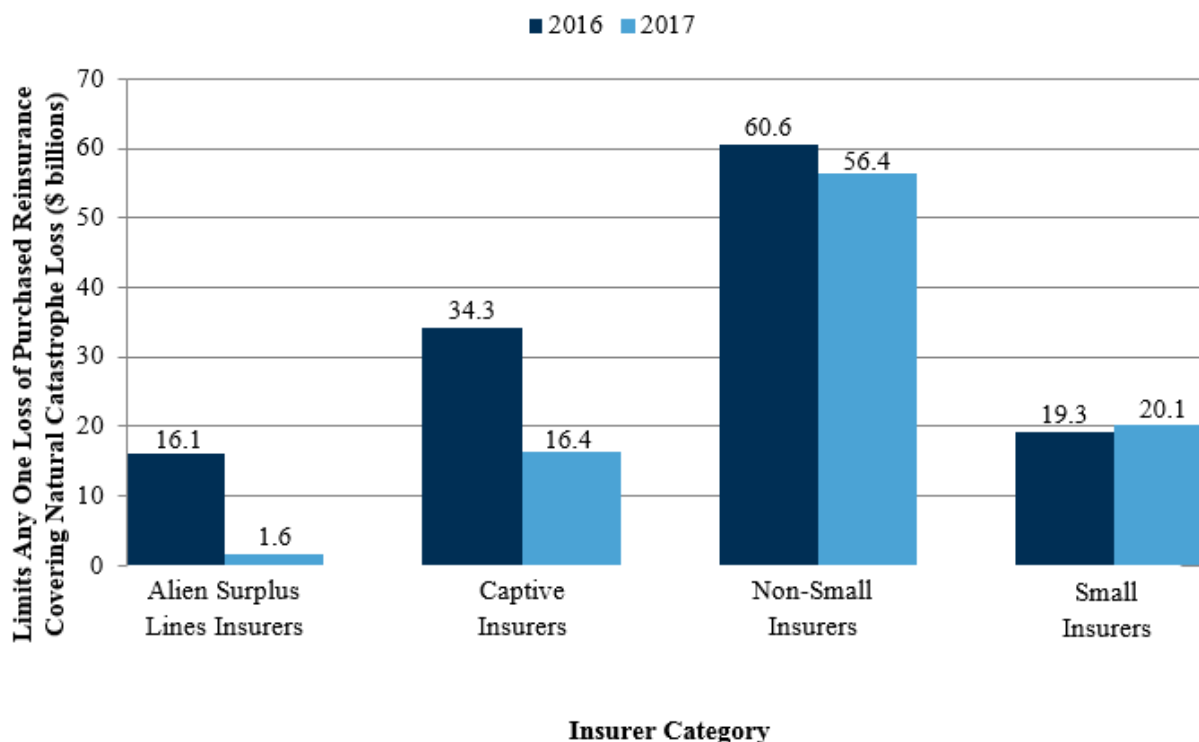


Source: 2017 and 2018 TRIP data calls

Figure 28 reflects the total amounts of per loss natural catastrophe reinsurance purchased by responding insurers. It reflects larger total amounts of natural catastrophe reinsurance versus terrorism risk reinsurance purchased on a per loss basis for non-small and small insurers, and lower amounts for both alien surplus lines and captive insurers.⁹⁸

⁹⁸ As in other areas, captive insurers present different issues concerning purchase of reinsurance applicable to terrorism risk losses. Captive insurers' reinsurance experience is further evaluated in Section VI.B.

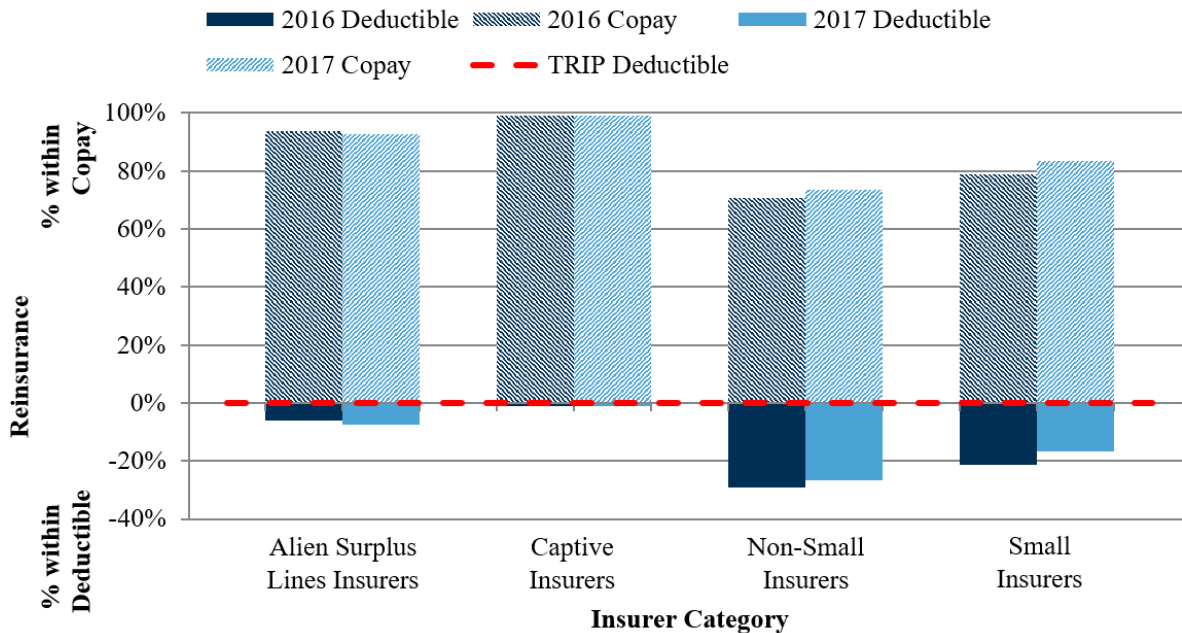
Figure 28: Total Per Loss Reinsurance Limits Purchased for Natural Catastrophes



Source: 2017 and 2018 TRIP data calls

Participating insurers will have exposure under TRIP for amounts within their Program deductibles and within their co-pay share above the Program deductible. These amounts are not subject to payment of the federal share of compensation under TRIP. Private reinsurance purchases by participating insurers could cover the direct insurance exposure of participating insurers within either of these areas. Based upon the retention information reported, Treasury calculated, as reflected in Figure 29, the degree to which reinsurance purchased by participating insurers for terrorism risk insurance would respond to losses within the ceding insurer's Program deductible versus within the co-pay layer above the Program deductible.

Figure 29: Total Per Loss Reinsurance Limits Purchased for TRIP Losses Within TRIP Deductible Layer and TRIP Co-Pay Layer (By Percentage)



Source: 2017 and 2018 TRIP data calls

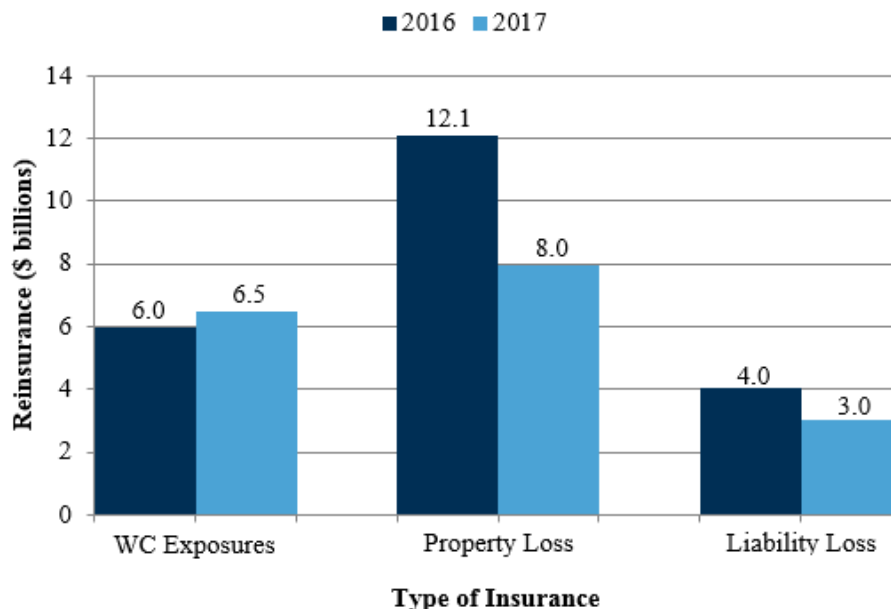
Each column in Figure 29 totals 100 percent of reinsurance purchases, as divided between amounts within TRIP deductibles (below the 0 percent line) and within the co-pay layer once the TRIP deductible has been satisfied (above the 0 percent line). The figure shows that private reinsurance remains more heavily concentrated in the exposure retained by participating insurers above their TRIP deductibles. Based on reported 2016 data, 86 percent of the purchased private reinsurance attaches above the participating insurer’s TRIP deductible; in 2017, 84 percent was in the area above the deductible. These figures are significantly affected by the experience of captive insurers, which purchase large amounts of reinsurance but have very small TRIP deductibles. When captive insurers are excluded, the amount of reinsurance responding above the TRIP deductible was 78 percent of the total in 2016 and 77 percent in 2017.

In many individual cases, reinsurance purchased for terrorism risk insurance remains subject to limitations and exclusions for specified risks. Many reporting insurers, for example, identified various exclusions from – or limitations to – coverage under their terrorism risk reinsurance, typically for exposures at particular locations and more generally for NBCR risks, discussed further below. Such limitations are consistent with the reported risk appetite of reinsurers for terrorism risk.⁹⁹

⁹⁹ See Marsh Comments, 17 (“Insurers with significant property and workers’ compensation accumulations in Tier 1 cities should expect to have less access to reinsurance capital than those portfolios with exposure in Tier 2 and Tier 3 cities and regions.”). The U.S. Government Accountability Office also found that reinsurers frequently write

Treasury also requested data regarding the reinsurance coverage that is expressly available for terrorism risks involving NBCR exposures. Many reporting insurers indicated that while they had some amount of reinsurance coverage for NBCR-related terrorism risk,¹⁰⁰ the total per loss figures identified by those insurers in Figure 30 – for property, liability, and workers’ compensation exposures involving NBCR-related terrorism risks – were far below the generally available limits identified (i.e., as described above and in Figure 27).

Figure 30: Total Per Loss Reinsurance Limits Purchased For NBCR Losses Subject to TRIP (By Type of Insurance)



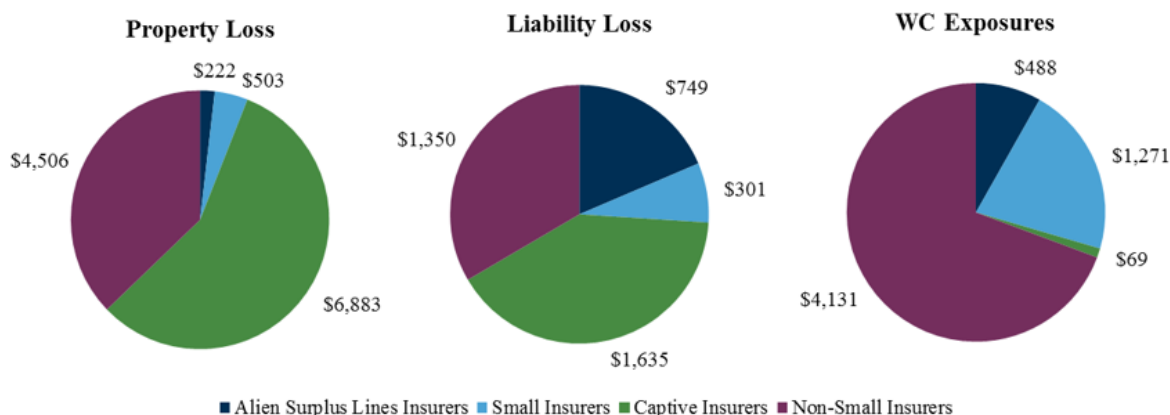
Source: 2017 and 2018 TRIP data calls

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

¹⁰⁰ Fifty percent of non-small insurers, 30 percent of small insurers, 22 percent of captive insurers, and 20 percent of alien surplus lines insurers reported that they had some amount of terrorism risk reinsurance for NBCR exposures in 2016.

The reported reinsurance purchases for NBCR exposures is allocated among the various insurer categories as shown in Figures 31 (for 2016) and Figure 32 (for 2017).

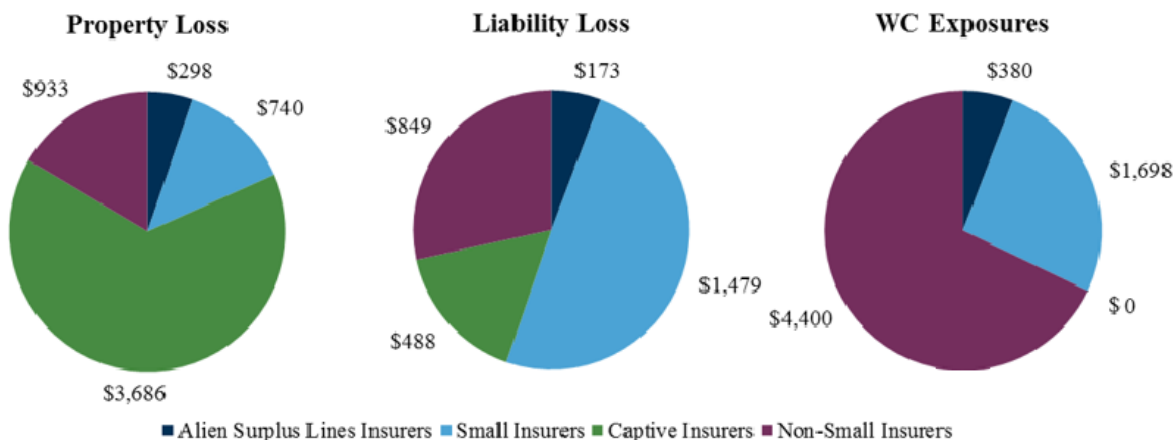
Figure 31: 2016 Total Per Loss Reinsurance Limits Purchased For NBCR TRIP Losses (By Type of Insurance), Allocated by Insurer Category (\$ millions)



Source: 2017 TRIP data call

Figure 32 illustrates the NBCR reinsurance purchases for 2017.

Figure 32: 2017 Total Per Loss Reinsurance Limits Purchased For NBCR TRIP Losses (By Type of Insurance), Allocated by Insurer Category (\$ millions)



Source: 2018 TRIP data call

Although TRIA requires participating insurers to offer insurance for terrorism risk on the same basis as for other perils, it does not require such insurance to be offered for exposures for which coverage is otherwise generally not provided (or specifically excluded) under the policy in question.¹⁰¹ Because many insurers generally exclude NBCR risks under P&C policies

¹⁰¹ See No Material Difference from Other Coverage, 31 C.F.R. § 50.22(b) (2018).

(excepting workers' compensation, as discussed below), the amount of direct insurance coverage for such risks may be substantially limited. The reported data reflects, however, that regardless of the amount of direct coverage available for NBCR exposures, it is less likely to be supported by private reinsurance than is the case with losses arising from conventional acts of terrorism. Furthermore, a large portion of the limited reinsurance obtained for NBCR exposures supports the risks assumed by captive insurers which – while potentially significant on an individual basis – represents only a small percentage of total risk exposures assumed by insurers participating in the Program.¹⁰²

As described above, private reinsurance capacity for terrorism risk has improved significantly since the immediate aftermath of the September 11 attacks. Many commenters attribute this improvement in large part to the backstop support the Program provides for a major portion of insurers' exposure to terrorism risk nationwide.¹⁰³ Nevertheless, the aggregation risks presented by terrorism continues to be a limiting factor upon the development of private reinsurance capacity, as does the difficulty of modeling potential terrorism exposure from both a frequency and severity standpoint.¹⁰⁴ Commenters (including state regulators) generally supported the proposition that there is sufficient private reinsurance capacity to support the risk exposures to which participating insurers remain exposed under the Program. However, commenters did not believe that there was sufficient private reinsurance capacity for the exposure the Program currently supports in connection with a catastrophic terrorism loss.¹⁰⁵ The TRIP data reflects that private reinsurance capacity is reduced as the aggregation risk presented by a particular type of terrorism loss (such as from an NBCR attack) increases.

E. Projections from Modeled Loss Questions

To assist in evaluating Program effectiveness and obtain some tangible assessment of the likely impact of the Program in a specific loss situation, Treasury posed modeled loss questions in both the 2017 and 2018 TRIP data calls.¹⁰⁶

¹⁰² See Section VI.B, addressing captive insurers.

¹⁰³ See, e.g., Lloyd's Comments, 4 ("The TRIP program is indeed the stabilizing factor that has allowed private reinsurance to come back to the terrorism space in the years following 9/11, and to grow over time."); Marsh Comments, 15 ("Since 2002, the federal terrorism risk insurance program has helped facilitate increased private market involvement, with commercial treaty and facultative reinsurance capacity increasing each year.").

¹⁰⁴ See NAIC Comments, 1; RAA Comments, 3.

¹⁰⁵ See NAIC Comments, 1 ("State insurance regulators have not seen evidence to suggest that the insurance marketplace is capable or willing to voluntarily take on a substantial portion of the risk of providing terrorism risk coverage."); AIA/NAMIC/PCI Comments, 4 ("The private reinsurance market generally has the requisite capacity to meet insurers' need to protect portions of their net retentions under the program trigger, individual insurer deductibles and co-pays."); RAA Comments, 3 ("Market reports reflect that for the foreseeable future . . . there will be an adequate supply of reinsurance capacity for coverage within the limits and deductible currently provided by the federal program.").

¹⁰⁶ Small insurers were not asked to complete the modeled loss questions in the 2017 and 2018 TRIP data calls. Given the size of the market represented by small insurers, and where their risks tend to concentrate, the experience

In both the 2017 and 2018 TRIP data calls, Treasury posed a question to non-small, alien surplus lines, and captive insurers asking them to report projected loss information based upon a defined, hypothetical terrorism event. For the 2017 TRIP data call, an event in New York City was used, and for the 2018 TRIP data call, an event in Chicago was used. In both data calls, insurers were given a description of the location and nature of the event, with certain specified assumptions concerning numbers of deaths and injuries, and the scope of property damage.¹⁰⁷ Based on this information, Treasury asked responding insurers to project the total amount of exposure arising from the event under the TRIP-eligible policies in force at the time of each event. Treasury further requested that insurers then divide that amount between (1) payments within the insurer's TRIP deductible; (2) private reinsurance payments within the insurer's TRIP deductible; (3) federal share payment under TRIP; (4) payments by the insurer in the co-pay layer above the TRIP deductible; and (5) private reinsurance payments within the co-pay layer above the insurer's TRIP deductible.

This data was used to assess the cost to taxpayers, and the likely reimbursement of any such amount through the recoupment process, caused by the scenarios. It also permits an evaluation as to how much loss falls within the various categories (losses to Program participants, private reinsurers, and the Program), and how the loss is sustained by the different insurer categories. Finally, the data also allows an assessment of how these insurer categories (non-small, alien surplus lines, and captive insurers) have been able to access private reinsurance in a way that is likely to respond to a terrorism loss. This can be compared to the nominal amounts of reinsurance limits otherwise being purchased by these sectors.

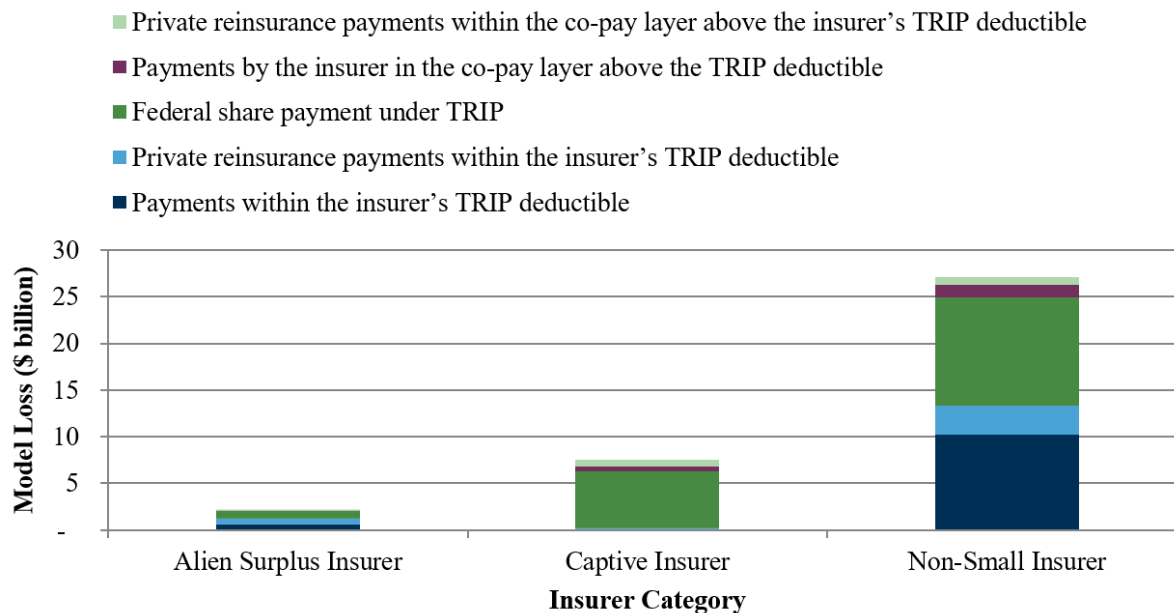
of small insurers may not significantly impact the aggregate results, even though certain small insurers might sustain a significant loss.

¹⁰⁷ No assumptions were posed about potential exposure under liability policies because of the difficulty to reasonably project how liability claims might be made in connection with an act of terrorism committed by a third party. Nonetheless, the possibility of liability claims remains an additional source of exposure to participating insurers and the Program. See, e.g., Insurance Information Institute, *Terrorism Risk: A Constant Threat* (March 2014), 6 (loss distribution estimates for losses arising from September 11 attacks reflecting that liability claims resulted in 12 percent of total losses),

https://www.iii.org/sites/default/files/docs/pdf/terrorism_white_paper_0320141_0.pdf.

Figure 33 illustrates how the 2017 modeled loss (in New York City) is projected to result in payments.

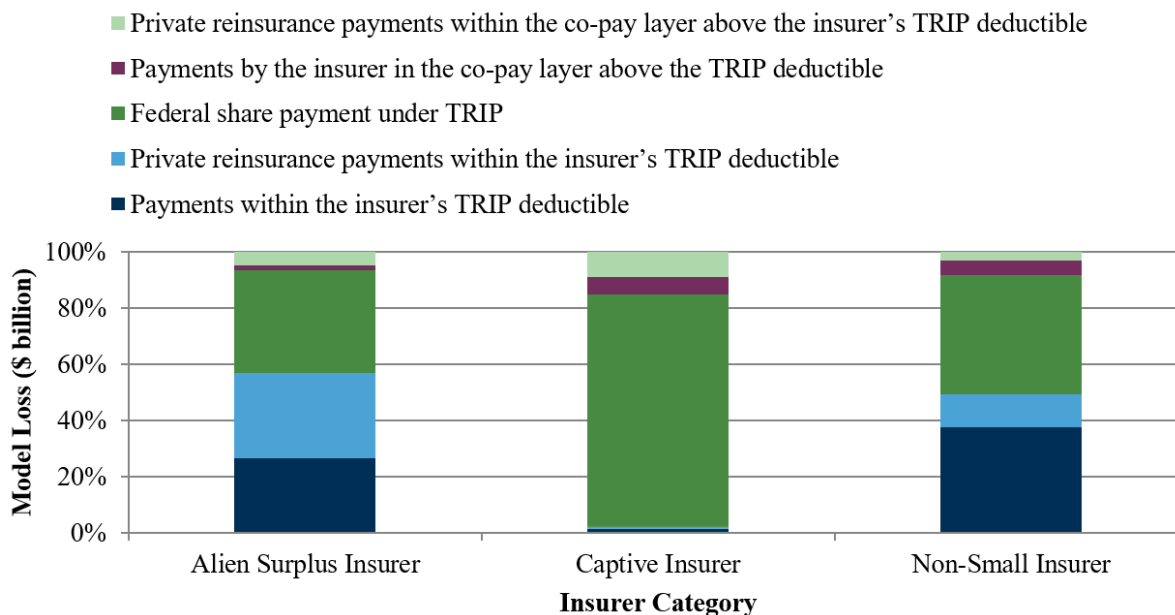
Figure 33: Total Insured Loss Payments Resulting from 2016 Modeled Loss Scenario By Insurer Category (New York City)



Source: 2017 TRIP data call

Figure 34 sets forth how the loss amounts generated under the 2016 modeled loss scenario are distributed (on a 100 percent basis) within each insurer category.

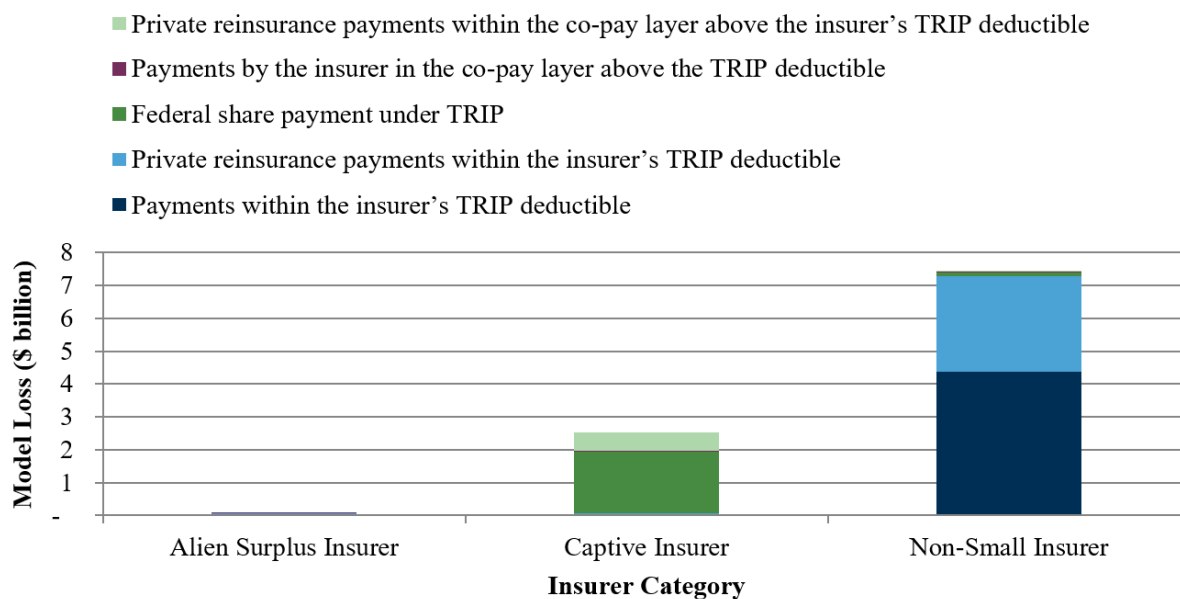
Figure 34: Distribution of Loss Payments Arising from 2016 Modeled Loss Scenario Within Each Insurer Category (New York City)



Source: 2017 TRIP data call

Figure 35 illustrates how the 2017 modeled loss (in Chicago) is projected to result in payments.

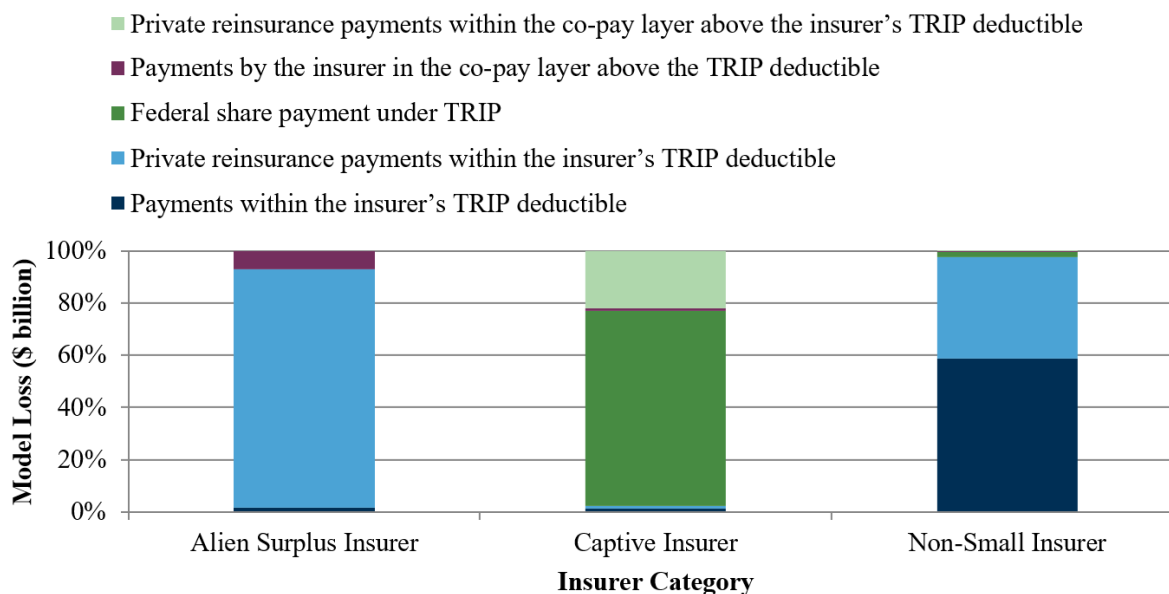
**Figure 35: Total Insured Loss Payments Resulting from 2017 Modeled Loss Scenario
By Insurer Category (Chicago)**



Source: 2018 TRIP data call

Figure 36 sets forth how the loss amounts generated under the 2017 modeled loss scenario are allocated on a 100 percent basis within each insurer category.

Figure 36: Distribution of Loss Payments Arising from 2017 Modeled Loss Scenario Within Each Insurer Category (Chicago)



Source: 2018 TRIP data call

The reported information indicates that both the New York City and Chicago scenarios – each involving conventional (non-NBCR) attacks – resulted in significant amounts of total losses that would result in payments by Treasury, although in each case those amounts will be largely or entirely subject to mandatory recoupment. Because of the recoupment feature of TRIP, Treasury would recoup at least 140 percent of the mandatory recoupment amounts in each case. Based upon the responses, however, there could be some payments by Treasury that would only be subject to discretionary recoupment, which would be determined based upon Treasury's consideration of certain factors at the time of the event in question.¹⁰⁸ Additional amounts would likely be subject to recoupment once losses associated with small insurers and liability claims involving all insurers (not captured in this analysis) are considered.

The modeled loss questions show that non-small insurers (the largest insurers participating in TRIP) account for the most losses and claims against the Program. The results also show that losses generated by captive insurers in connection with these hypothetical loss events tend to be higher than their proportionate DEP share of the market. Although a proportionally greater share of private reinsurance participation is also generated by captive insurer losses, the data also

¹⁰⁸ See Mandatory and Discretionary Recoupment, 31 C.F.R. § 50.90(b) (2018); TRIA § 103(e)(7)(D).

indicates that captive insurers would receive a greater proportional share of support from the Program under these modeled loss scenarios.¹⁰⁹

F. Terrorism Risk Insurance for Cyber Losses

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 attacks, fraud committed by misuse of data, any liability arising from data storage, and the availability, integrity and confidentiality of electronic information.”¹¹⁰ Although a variety of insurance products are emerging to address these exposures,¹¹¹ they can be characterized as falling into two broad categories: (1) coverage provided for cyber-related losses in a separate, “standalone” policy; and (2) coverage provided as a component of a broader, package policy also providing coverage for non-cyber losses.¹¹²

Cyber insurance is a relatively new coverage that is continuing to develop. At this time, the market for cyber insurance is most developed in the United States, which accounts for the vast bulk of written premiums.¹¹³ Based on data reported to state regulators, on a direct written premium basis (as opposed to DEP, which is the measurement used in connection with the Program), total cyber premiums in 2017 were \$1.779 billion, consisting of \$994 million under standalone cyber policies, and \$785 million as cyber insurance premiums written under a broader package policy.¹¹⁴ These figures do not include cyber insurance premiums written by alien surplus lines or captive insurers.

While the perpetrators of malicious cyber activity can have a variety of motivations, commenters have recognized that such malicious acts could be employed by terrorists in furtherance of their goals.¹¹⁵ Depending upon the specific circumstances presented, malicious cyber activity could

¹⁰⁹ This is consistent with the role captive insurers have had in providing “‘gap-filling’ insurance products” that might not be otherwise available in the market. See VCIA Comments, 1.

¹¹⁰ FIO, U.S. Department of Treasury, *Annual Report on the Insurance Industry* (2017), 54 https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/2017_FIO_Annual_Report.pdf (citing CRO Forum, *Cyber Resilience: The Cyber Risk Challenge and the Role of Insurance* (December 2014), 5, <https://www.thecroforum.org/wp-content/uploads/2015/01/Cyber-Risk-Paper-version-24-1.pdf>).

¹¹¹ FIO analyzed the cyber insurance market in its most recent Annual Report. See FIO, *2017 Annual Report*, 54-58.

¹¹² Coverage for cyber losses can also arise under policies that do not expressly state that they cover cyber-related losses, but which do not expressly exclude coverage for such losses. Such coverage is generally identified as “non-affirmative” cyber coverage. See FIO, *2017 Annual Report*, 54.

¹¹³ FIO, *2017 Annual Report*, 56.

¹¹⁴ See generally A.M. Best, “Cyber Insurance Market Sees Steady Growth but Still Awaiting a Real Growth Spurt,” news release, May 18, 2018, <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?AltSrc=108&refnum=208605>.

¹¹⁵ See, e.g., Cambridge Centre for Risk Studies, *Cyber Terrorism: Assessment of the Threat to Insurance* (November 2017), 4-5, <https://www.poolre.co.uk/wp-content/uploads/2017/11/Pool-Re-Cyber-Terrorism-Insurance->

potentially constitute an act of terrorism under TRIA. As a result, to the extent cyber insurance is written under a policy that is within the definition of “property and casualty insurance” under TRIA (i.e., the TRIP-eligible lines of insurance) the provisions of TRIA apply to such policies. This includes the requirement to make available terrorism risk insurance under such policies, as well as potential availability of the federal backstop for losses arising under such policies from a certified act of terrorism. Treasury’s guidance states that TRIP and the requirements of TRIA will apply to any policy, including a standalone cyber policy, written in a line of insurance that is subject to the Program.¹¹⁶

To gauge the extent to which terrorism risk insurance is being obtained in connection with standalone cyber policies, Treasury began in the 2018 TRIP data call to request information on such policies from all participating insurers. Figure 37 summarizes the reported information, based upon the United States as a whole and on a direct earned premium basis (as distinguished from a direct written premium basis).

Figure 37: 2017 TRIP-Eligible DEP for Cyber Policies

	Standalone Cyber Policies		Package Cyber Policies		All Cyber Policies	
		% of Total TRIP- Eligible DEP		% of Total TRIP- Eligible DEP		% of Total TRIP- Eligible DEP
	Cyber DEP		Cyber DEP		Cyber DEP	
Alien Surplus Lines Insurers	\$169,607,676	17.8%	\$ 194,484,983	9.7%	\$ 364,092,660	12.3%
Captive Insurers	32,419,989	3.4%	93,643,715	4.6%	126,063,704	4.2%
Non-Small Insurers	707,547,597	74.4%	1,594,878,711	79.1%	2,302,426,306	77.6%
Small Insurers	41,750,929	4.4%	\$132,513,499	6.6%	\$174,264,428	5.9%
Total	\$951,326,191	100%	\$2,015,520,908	100%	\$2,966,847,098	100%

Source: 2018 TRIP data call

Non-small and small insurers reported larger cyber premiums to Treasury compared to the amounts they reported to state regulators. This could be caused by the fact that some of the premiums reported to Treasury for non-small and small insurers are from alien surplus lines insurers that are affiliated with those entities, and such premiums would not have been captured

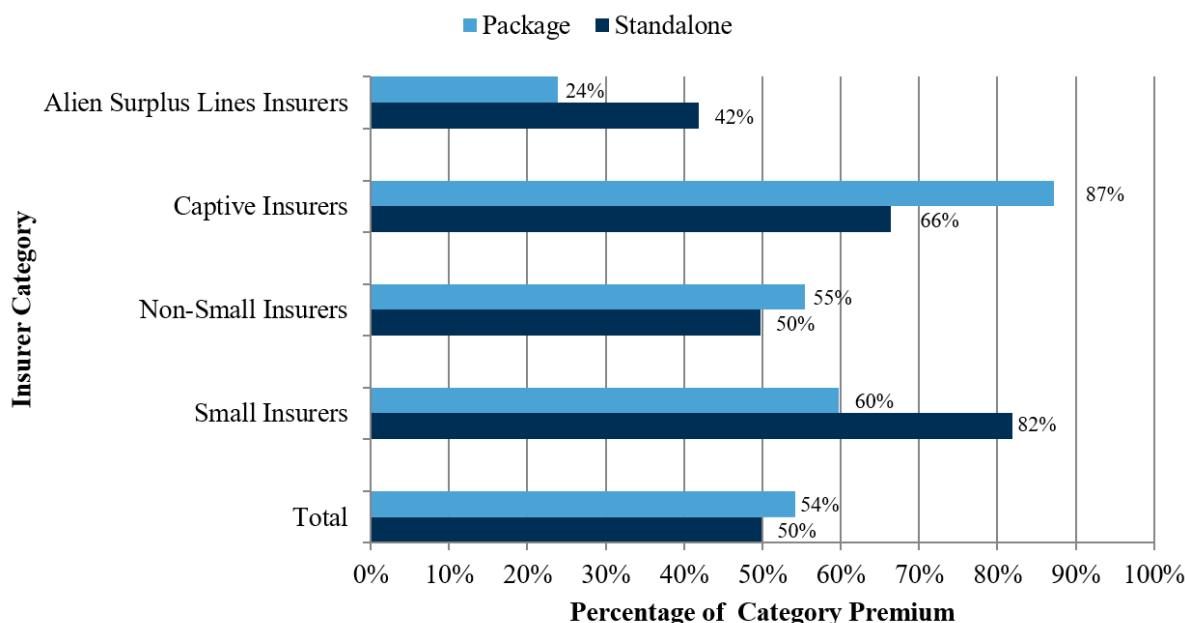
[Futures-Print-Version-19112017-1.pdf](#); Marsh, 2016 *Terrorism Risk Insurance Report* (July 2016), 7, <https://www.marsh.com/content/dam/marsh/Documents/PDF/US-en/2016%20Terrorism%20Risk%20Insurance%20Report.pdf>.

¹¹⁶ See Guidance Concerning Stand-Alone Cyber Liability Insurance Policies Under the Terrorism Risk Insurance Program, 81 Fed. Reg. 95312 (December 27, 2016), <https://www.gpo.gov/fdsys/pkg/FR-2016-12-27/pdf/2016-31244.pdf>. For the same reason that standalone cyber insurance written in TRIP-eligible lines of insurance is subject to the Program, non-affirmative cyber insurance is subject to TRIP if written in a TRIP-eligible line of insurance. See 81 Fed. Reg. 95313 (“Certain insurance policies that may contain a ‘cyber risk’ component or which do not exclude losses arising from a cyber event continue to be written in existing TRIP-eligible lines of insurance and are thus subject to the provisions of the Program.”). On the other hand, much cyber insurance in the past has been written as Professional Liability Insurance, which is expressly excluded from the Program. 81 Fed. Reg. 95313; TRIA § 102(11)(B)(xi).

in the data reported to state regulators. As reflected by Figure 37, the information from alien surplus lines insurers that do report separately to Treasury indicates that such insurers have a larger share of the cyber insurance market than they do generally for TRIP-eligible lines of insurance.

The take-up rate for terrorism risk insurance within the cyber products reported to Treasury, by insurer category, are reflected in Figure 38.

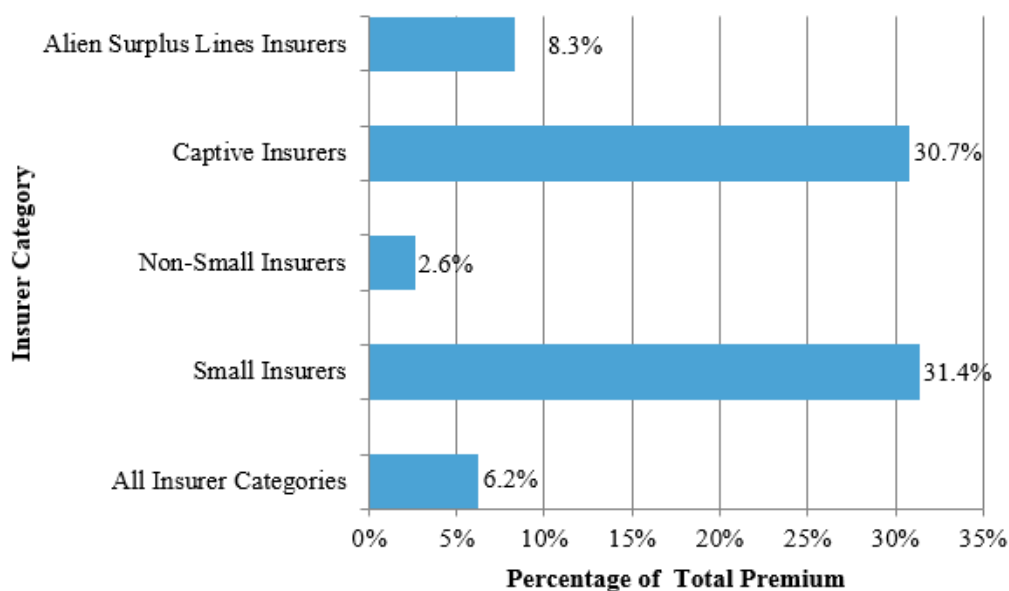
Figure 38: 2017 Take-Up Rates for Terrorism Risk Insurance under Cyber Policies (By TRIP-Eligible DEP)



Source: 2018 TRIP data call

Treasury requested information concerning the terrorism risk premium component of cyber coverage under both standalone cyber policies as well as the terrorism risk premium component within the cyber component of package policies. Much of the information provided in connection with package policies, however, may reflect terrorism risk premium under the entire policy in question, which does not provide a good comparison point for the terrorism risk insurance component of the cyber coverage. The information provided for standalone cyber policies as reflected in Figure 39, however, does appear to reflect the likely charge associated for obtaining terrorism risk insurance associated with cyber insurance.

Figure 39: 2017 Percentage of Total Policy DEP Allocated to Terrorism Risk Under Standalone Cyber Policies



Source: 2018 TRIP data call

The first year of data on cyber insurance indicates that the take-up rate for cyber insurance covering terrorism risk subject to the Program is similar to the take-up rates generally indicated for lines of terrorism risk insurance that remain voluntary. Furthermore, terrorism risk insurance premiums appear to comprise a relatively small percentage charge of the total cyber premiums charged. Treasury will continue to monitor this issue.

VI. ADDITIONAL ANALYSIS ON INSURER CATEGORIES

As indicated in Figure 1, non-small insurers represent more than 80 percent of the market for terrorism risk insurance in the TRIP-eligible lines of insurance. Many of the prior analyses are heavily weighted by the experience of those insurers. Treasury provides further information here concerning the other insurer categories that participate in the Program.

A. Small Insurers

In 2017, Treasury issued a study addressing domestic small insurers, which Treasury defined as those insurers that might not be able to obtain reimbursement under the Program even after satisfaction of their individual deductibles due to the Program Trigger.¹¹⁷ Treasury will issue another study concerning the competitiveness of small insurers within the terrorism risk insurance market in 2019, as required by TRIA.¹¹⁸

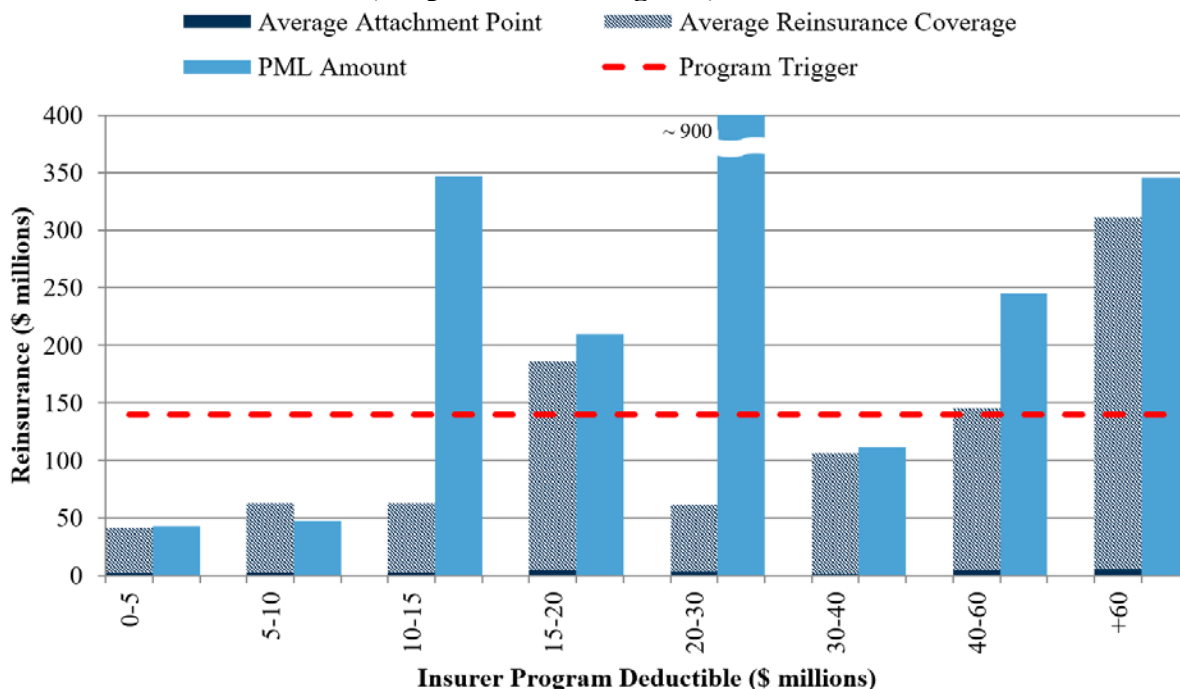
While Treasury's next small insurer study will seek to address the participation of small insurers within TRIP in general terms, Treasury will comment here on one issue concerning small insurers that it identified in the 2017 Small Insurer Study, based upon the further information developed by the 2018 TRIP data call. In that study, Treasury observed that while small insurers are significant purchasers of private reinsurance, they are not uniformly obtaining reinsurance to cover the entire risk of their potential exposure below the Program Trigger. As a result, there is potential for some small insurers to sustain losses above their Program deductibles, but be unable to receive federal reimbursement due to the Program Trigger not being met.¹¹⁹ In the 2018 TRIP data call, Treasury also requested probable maximum loss (PML) information – i.e., the largest single loss an insurer projects it might sustain based upon the portfolio of policies it has issued – to assess whether this apparent lack of private reinsurance protection between a small insurer's TRIP deductible and the Program Trigger amount might be explained by the insurer's own assessment of its maximum likely exposure from an individual loss. Figure 40 reflects the same analysis respecting the reinsurance purchases of small insurers vis-à-vis the Program Trigger, but based upon the 2018 TRIP data call – thus showing reinsurance purchases for 2017, the higher Program Trigger (\$140 million) in effect during 2017, and the 2017 PML figures reported by small insurers.

¹¹⁷ See FIO, *2017 Small Insurer Study*, 6-7 (explaining definition of small insurers by reference to application of the Program Trigger).

¹¹⁸ TRIA § 108(h).

¹¹⁹ See FIO, *2017 Small Insurer Study*, 25-27.

Figure 40: 2017 Comparison Between Small Insurer Deductibles, Reported PML Figures, and Reinsurance Purchases



Source: 2018 TRIP data call

Where reinsurance purchases approximate a small insurer's PML, the lack of reinsurance up to the Program Trigger may not be significant, if the insurer is not exposed to a catastrophic loss up to that amount. As reflected in Figure 40, consideration of a small insurer's PML estimate may explain the lack of reinsurance purchases up to the amount of the Program Trigger in many cases. The reported information, however, still reflects a significant component of small insurers that remain exposed for a PML above its Program deductible and below the Program Trigger amount, without the support of private reinsurance for that exposure.

B. Captive Insurers

Captive insurers are licensed insurers formed to insure the risks of a parent or other affiliated entities. Such companies in the United States are supervised and regulated by the state insurance departments of their domicile, under state laws and regulations specifically applicable to captive insurers.¹²⁰

U.S. domestic (domiciled or licensed) captive insurers that provide insurance in TRIP-eligible lines participate in the Program.¹²¹ As of December 31, 2016, there were 3,285 U.S. domiciled captive insurers writing various lines of insurance and reinsurance (including but not limited to the TRIP-eligible lines of insurance), distributed among 28 states and the District of Columbia.¹²² By comparison, the number of domestic U.S. captive insurers writing insurance in TRIP-eligible insurance lines and required to report to Treasury for Calendar Year 2016 was 517.¹²³

The potential exposure associated with terrorism risk insurance written by captive insurers for a parent or other affiliated entity differs from that of conventional commercial insurers that must “make available” terrorism risk insurance coverage to all potential, third-party policyholders in the TRIP-eligible lines of insurance. For captive insurers, the offer and acceptance of terrorism risk insurance under the Program is controlled by the insured. They are also regulated under a separate regulatory regime under relevant state law.¹²⁴ Therefore, even though captive insurers underwrite a significant portion of the risks for losses arising from acts of terrorism that are covered under TRIP, they can also be analyzed separately.

Captive insurers have not been required to report information publicly concerning their operations. However, industry information indicates that captive insurers may issue policies for terrorism risk subject to the Program that provide coverage that might not be readily available,

¹²⁰ A captive insurer is an insurer licensed under the captive insurance laws or regulations of any state. Definitions, 31 C.F.R. §50.4(g) (2018).

¹²¹ See Definitions, 31 C.F.R. § 50.4(o)(1)(i)(A) (2018). See also Terrorism Risk Insurance Program, 68 Fed. Reg. 41250, 41259-60 (July 11, 2003), <https://www.gpo.gov/fdsys/pkg/FR-2003-07-11/pdf/03-17585.pdf>.

¹²² “Captives by State,” Insurance Information Institute, last updated March 2018, <https://www.iii.org/publications/a-firm-foundation-how-insurance-supports-the-economy/a-50-state-commitment/captives-by-state>.

¹²³ The number of captive insurers reporting data to Treasury in the 2018 TRIP data call increased to 575; however, Treasury does not have a comprehensive U.S. captive count as of the end of 2017. In addition, there are a larger number of captive insurers in non-U.S. jurisdictions, estimated to be approximately 6,600 by the end of 2017. Non-U.S. captive insurers are unable to participate in TRIP unless they have been licensed by one or more state insurance departments to write insurance in one or more U.S. jurisdictions. Based on the 2018 TRIP data call, only one non-U.S. captive insurer reported information to Treasury as a Program participant.

¹²⁴ See Definitions, 31 C.F.R. §50.4(g) (defining captive insurer as “an insurer licensed under the captive insurance laws or regulations of any state”).

such as for NBCR risks, or for “trophy” properties.¹²⁵ The formation of a captive insurer may or may not provide certain tax advantages to a business entity that purchases conventional insurance, relative to one that self-insures its risks simply by putting aside funds to pay anticipated losses and claims.¹²⁶

Captive insurers often have premium writings (upon which Program deductible calculations are based) that are small, relative to other insurer categories, and as a result may be in a position to claim Program reimbursement subject to low thresholds (in terms of absolute dollars), assuming that overall losses from one or more certified acts of terrorism in a given calendar year are sufficient to trigger the Program.¹²⁷ Given their size, however, captive insurers could be in a position in which they could sustain significant losses above their TRIP deductible that would not trigger reimbursement under TRIP in light of the Program Trigger.¹²⁸

¹²⁵ See U.S. Government Accountability Office, *Terrorism Insurance: Status of Efforts by Policyholders to Obtain Coverage* (2008), 9, 14-16, <http://www.gao.gov/assets/290/280918.pdf>.

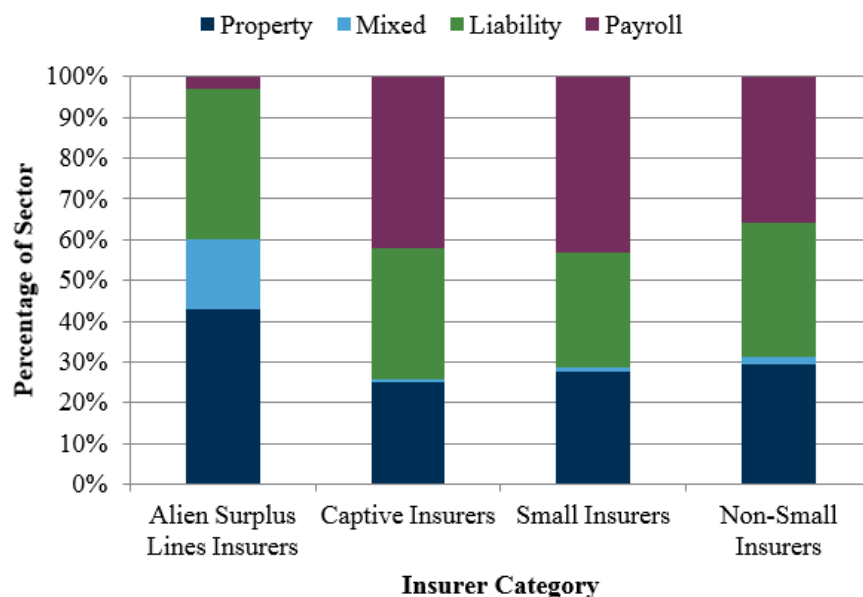
¹²⁶ The totality of the tax implications of an insurance arrangement, and self-insurance arrangement, depends upon the specific circumstances presented. In certain cases, however, an insurer with relatively small amounts of total gross receipts or premiums may qualify for favorable tax treatment under 26 U.S.C. § 831(b). A stock insurance company (other than a life insurance company) with gross receipts of \$600,000 or less (of which more than 50 percent are premiums) is a tax-exempt corporation. A mutual non-life insurance company with gross receipts of \$150,000 or less (of which more than 35 percent are premiums) is also tax-exempt (26 U.S.C. § 501(c)(15)). In 2018, a non-life insurance company that meets certain diversification requirements regarding policyholders or ownership interests, with annual premiums of \$2.3 million or less, may elect to be taxed only on its taxable net investment income. This premium threshold is subject to an annual inflation adjustment (26 U.S.C. § 831(b)). Information reported to Treasury during the 2017 and 2018 TRIP data calls, however, reflects that over 97 percent of captive insurers, by DEP, are ineligible to elect favorable treatment under 26 U.S.C. § 831(b) because they received premiums in excess of the then-specified premium threshold amount. Accordingly, Treasury’s analysis of captive insurers under the Program is mostly based upon data from captive insurers that are taxed on their full income, including both underwriting and investment income.

¹²⁷ PWG, *2010 Market Conditions Report*, note 107 (observing that “[c]aptives are expected to have smaller insurer deductibles as compared to traditional insurers since DEP in TRIA lines is likely to be small,” but noting that total losses must still exceed the Program Trigger, such that “captives may require additional capital or reinsurance protection increasing the cost of coverage”).

¹²⁸ See FIO, *2017 Small Insurer Report*, 21-23. Although this report focused upon the impact of the Program Trigger upon small insurers, almost all captive insurers are potentially presented with the same risk.

Captive insurers tend to insure a similar breakdown of TRIP exposures as other insurers generally, and the differential as between alien surplus lines insurers is largely attributable to the lack of substantial participation by alien surplus lines insurers in the market for workers' compensation insurance.¹²⁹ Figure 41 shows the relative breakdowns based on 2017 information.

Figure 41: 2017 DEP in TRIP-Eligible Lines (By Insurer Category)

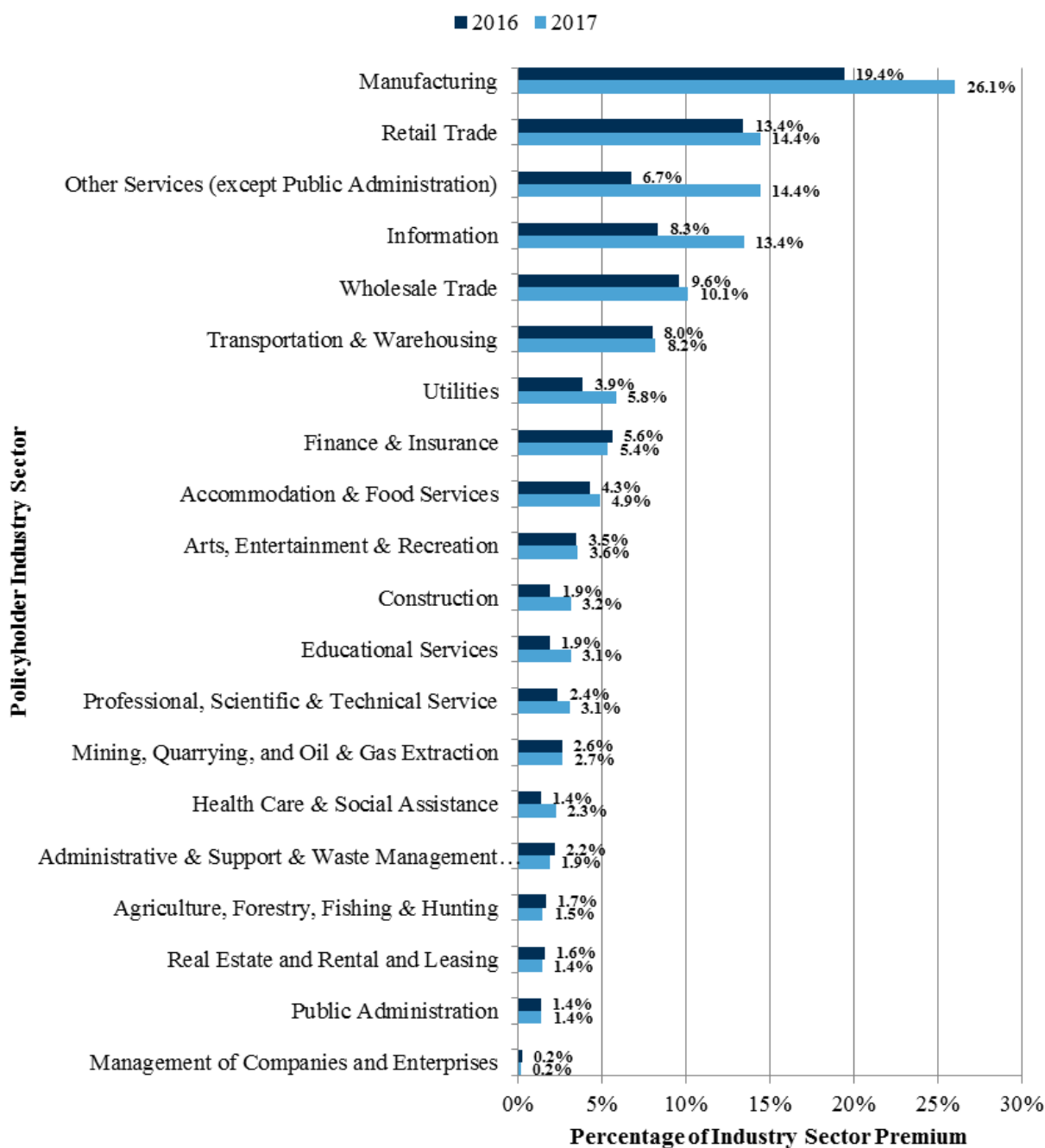


Source: 2018 TRIP data call

Captive insurers underwrite risks in all policyholder industry sectors, based upon their responses to the TRIP data calls classifying the business operations of their principal (owner) policyholder. The information provided in Figure 42 reflects the manner in which policyholder industry categories are distributed within the insurance written by captive insurers that is subject to the Program.

¹²⁹ Captive insurers are typically unable to provide workers' compensation insurance directly to their policyholders as a matter of state law. Thus, much of this coverage reflects the price of reimbursement mechanisms, where the captive insurer provides reimbursement of deductible amounts that the policyholder is responsible for under policies issued by conventional insurers subject to large deductibles.

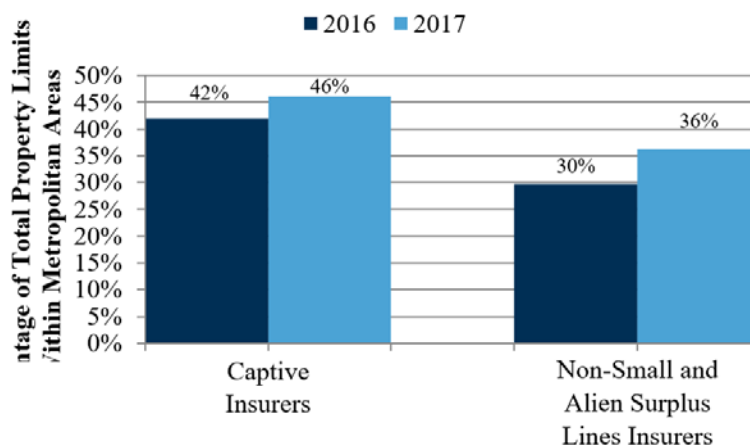
Figure 42: Captive Insurer TRIP-Eligible Lines DEP Allocated by Policyholder Industry Sectors



Source: 2017 and 2018 TRIP data calls

As reflected by Figure 43, the proportion of property exposures written by captive insurers subject to the Program are somewhat more concentrated in the larger metropolitan areas than is the case for non-small and alien surplus lines insurers.

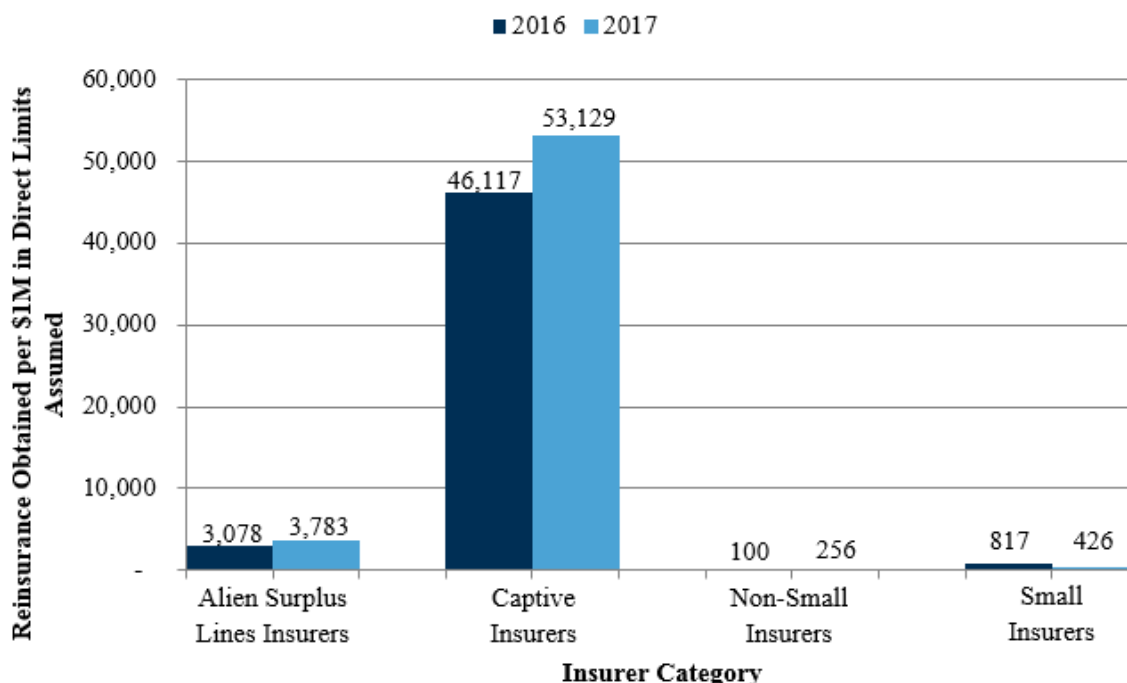
Figure 43: Percentage of Total Property Limits within Metropolitan Areas For Captive Insurers versus Non-Small and Alien Surplus Lines Insurers



Source: 2017 and 2018 TRIP data calls

In the 2017 TRIP data call, approximately 37.5 percent of captive insurers reported purchasing reinsurance that would cover an act of terrorism occurring in 2016 and certified under TRIA; in the 2018 TRIP data call that figure dropped to 31.5 percent for acts of terrorism occurring in 2017. The data also indicates that captive insurers are obtaining reinsurance coverage for a greater proportion of their insurance risks than is the case for other insurer categories. Figure 44 compares the reinsurance limits for terrorism risk insurance subject to the Program against the total direct property and liability limits assumed under policies subject to TRIP.

Figure 44: Reinsurance Obtained Per \$1 Million in Direct Policy Limits Subject to TRIP (Property and Liability Combined)



Source: 2017 and 2018 TRIP data calls

Captive insurers, as compared to other types of insurers, may be better able to purchase reinsurance coverage for terrorism risk. This is because conventional commercial insurers will generally have business to reinsure that will present a much broader range of exposures (in terms of type and locations), with the associated aggregation risks presented, than a captive insurer. By contrast, captive insurers write the range of risk exposures presented by their policyholder owners, which will usually be more limited and defined than the portfolio of risks underwritten by a conventional commercial insurer.

C. Alien Surplus Lines Insurers

Alien surplus lines insurers are those non-U.S. insurers that have been qualified to do business in the United States through a process administered by the NAIC assessing the financial stability and trustworthiness of the entities in question.¹³⁰ Those insurers appearing on the current Quarterly Listing of Alien Surplus Lines Insurers participate in the Program pursuant to TRIA.¹³¹ The companies on the Quarterly Listing of Alien Surplus Lines Insurers fall into two general categories: (1) insurance syndicates operating at Lloyd's of London; and (2) insurance companies domiciled in various non-U.S. jurisdictions (principally European countries and non-U.S. jurisdictions in North America). Separate and apart from their participation in TRIA (like other insurers, not all insurance written by alien surplus lines insurers is in the TRIP-eligible lines of insurance), Lloyd's accounts for approximately 76 percent of the alien surplus lines DEP in the United States, while individual companies comprise the balance of 24 percent.¹³²

The TRIP data calls do not permit an exact evaluation of the participation of alien surplus lines insurers within the Program because of the Program data collection mechanics and the manner in which many such entities participate within TRIP. Many alien surplus lines insurers (Lloyd's syndicates as well as individual companies) are affiliated with U.S.-based insurance groups. Treasury collects data for the Program by insurer group, because TRIP operates for most purposes on a group basis – i.e., insurer groups submit claims on a group basis, and the deductible that must be satisfied is calculated by reference to the TRIP-eligible lines DEP of the group as a whole. As a result, some of the experience of alien surplus lines insurers participating in the Program is incorporated within the data reported by non-small and small insurers. Given the size of the premium writings of alien surplus lines insurers, this does not have a significant impact on the reported results for non-small and small insurers. It does, however, potentially affect the ability to analyze the data of the entire population of alien surplus lines insurers.

Most of the experience reflected by the reporting of alien surplus lines insurers is set forth above, in the relevant sections of the Report. For purposes of premium, however, Treasury collects information from alien surplus lines insurers based upon a different array of insurance lines that such insurers typically utilize in connection with their other operations. Figure 45 illustrates charges by alien surplus lines insurers for terrorism risk insurance coverage, by the lines utilized for alien surplus lines reporting.¹³³

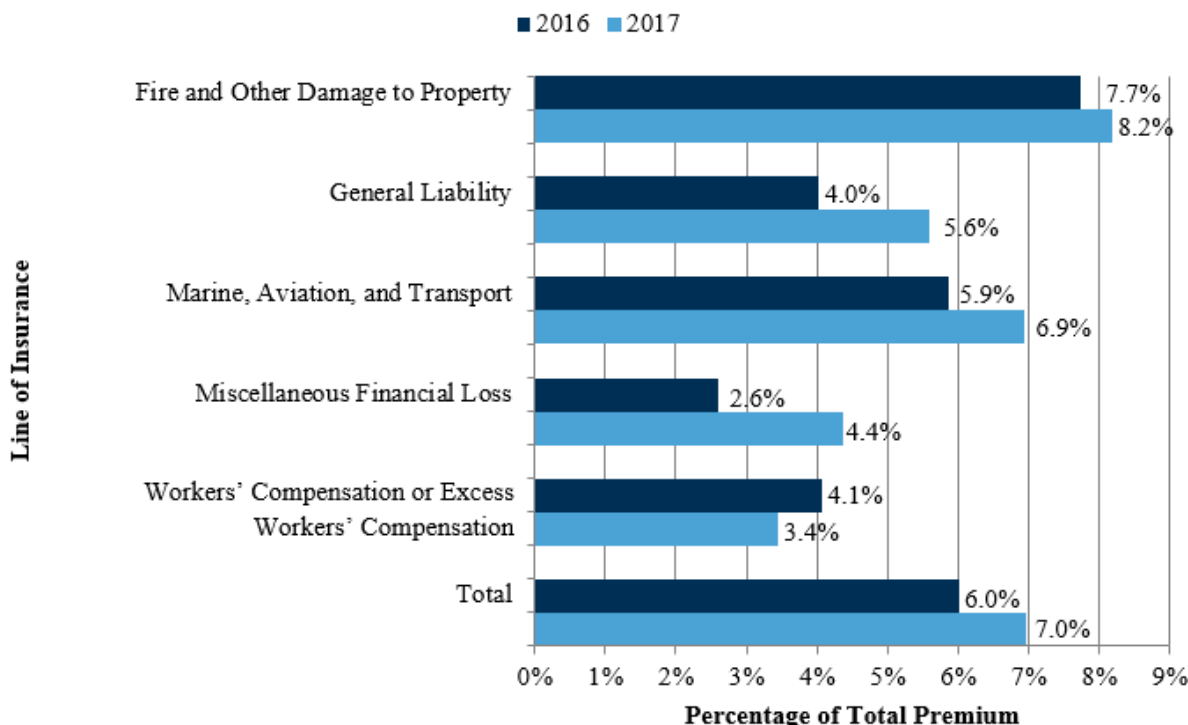
¹³⁰ See National Association of Insurance Commissioners, *Quarterly Listing of Alien Surplus Lines Insurers* (April 2018), http://www.naic.org/prod_serv/QLS-AS-219.pdf.

¹³¹ See TRIA § 102(6); Definitions, 31 C.F.R. § 50.4(o)(1)(i)(B) (2018).

¹³² Based upon 2016 data. See A.M. Best, *Surplus Lines Continue to Overcome Market Pressures* (September 1, 2017), 3, http://www3.ambest.com/ambv/sales/bwpurchase.aspx?record_code=265317.

¹³³ Only a very small amount of terrorism risk insurance is provided by alien surplus lines insurers for no additional charge.

Figure 45: Terrorism Risk Insurance Premiums as a Percentage of Total Policy DEP When a Premium is Charged By Alien Surplus Lines Insurers (By Line of Insurance)



Source: 2017 and 2018 TRIP data calls

The information reported by unaffiliated alien surplus insurers reflects a higher percentage charge for terrorism risk insurance than has been reported by admitted insurers. That differential is to be expected since these insurers write on a surplus lines basis, which responds in large part to risks that may be more difficult to insure, and which cannot be placed in the admitted market.

VII. WORKERS' COMPENSATION

Workers' compensation insurance is a product offered by insurers to employers that covers costs related to medical care and treatment, rehabilitation, loss of wages, and other financial hardships encountered by workers resulting from workplace injuries. Workers' compensation is a TRIP-eligible line of insurance and, thus, is covered under the Program. As a matter of state law, every state with the exception of Texas¹³⁴ requires employers to possess some form of workers' compensation coverage to cover injured employees,¹³⁵ although self-insurance of workers' compensation exposures is also permitted in most states.¹³⁶ A qualified self-insurer may obtain excess workers' compensation insurance from a conventional insurance carrier, which will respond to losses above certain thresholds, either on an aggregate or individual claimant basis.¹³⁷ Although most captive insurers are unable to write direct workers' compensation insurance as a matter of state law, many captive insurers issue workers' compensation deductible reimbursement policies, which reimburse their policyholders for some portion of the deductibles existing under policies issued to the captive insurer's parent by conventional commercial insurance companies.¹³⁸

Unlike most lines of insurance, state laws prohibit insurers from excluding coverage for terrorism risk, including NBCR risks, in conjunction with workers' compensation coverage. Terrorism risk cannot be excluded from a policy and, therefore, the take-up rate for terrorism

¹³⁴ In Texas, an employer (subject to certain exceptions) can decline to purchase workers' compensation insurance entirely (including for loss arising from terrorism), or otherwise qualify as a self-insurer for the exposure. However, where a Texas employer elects to remain outside of the workers' compensation system, it also remains subject to common law actions for employment-related injuries. See generally Texas Labor Code, Title 5 (Workers' Compensation), Chapter 401 *et seq.*

¹³⁵ In most states, mandatory workers' compensation coverage does not apply to the self-employed or independent contractors. Additionally, in some states, mandatory coverage does not extend to some employees in certain sectors, such as farm and domestic workers.

¹³⁶ Based upon benefits payment history, self-insurance represents an estimated 26 percent of all workers' compensation. See, e.g., Christopher F. McLaren and Marjorie L. Baldwin, *Workers' Compensation: Benefits, Coverage, and Costs, (2015 Data)*, National Academy of Social Insurance (October 2017), 23, https://www.nasi.org/sites/default/files/research/NASI_Workers%20Comp%20Report%202017_web.pdf. Although self-insurers are also responsible for terrorism-related workers' compensation losses, self-insurance arrangements that are not accomplished through P&C insurance within the scope of TRIA are not at this time subject to the Program.

¹³⁷ Excess workers' compensation insurance is "a type of coverage available for risks that choose to self-insure the majority of workers compensation loss exposures. Two categories of coverages are available: specific, which controls loss severity by placing a cap on losses the insured must pay arising out of a single occurrence, and aggregate, which addresses loss frequency by providing coverage once a cumulative per occurrence loss limit is breached. "Excess Workers Compensation Insurance," International Risk Management Institute, <https://www.irmi.com/term/insurance-definitions/excess-workers-compensation-insurance>.

¹³⁸ See, e.g., Rodd Zolkos, "Captives Prove a Natural Fit for Workers Comp Coverage," *Business Insurance* (February 27, 2011), <http://www.businessinsurance.com/article/20110227/STORY/302279997/Captives-prove-a-natural-fit-for-workers-comp-coverage>.

coverage is 100 percent as it relates to workers' compensation insurance. Furthermore, payments under workers' compensation policies are only limited by the scope of workers' compensation benefits available under state law to employees entitled to the payment of those benefits.¹³⁹

NBCR events present a more pronounced aggregation risk – where the same event causes losses to a large number of policyholders of the same insurer – than conventional terrorism claims because of the broad-based losses potentially arising from an NBCR incident.¹⁴⁰ An insurer cannot decline to write terrorism risk coverage (or the NBCR component of it) in conjunction with workers' compensation coverage, and workers' compensation insurers must find other ways in which to manage the aggregation risk. For example, insurers attempt to avoid writing policies that present substantial accumulation of exposures in the same particular location.¹⁴¹ This presents a greater issue for insurers and employers in large metropolitan areas, with greater concentrations of employees subject to workers' compensation than in less densely populated areas. For employers seeking coverage in such areas, and unable to find an insurer in the voluntary market, the employer could be required to seek coverage from the residual market, which must provide coverage to all applicants, although such coverage likely comes with a higher premium.

¹³⁹ See AIA/NAMIC/PCI Comments, 5 (identifying challenges in the market and observing as well that “[w]hile workers' compensation insurers do purchase excess of loss reinsurance to help ensure their ability to pay catastrophic, multiple-injury claims, such reinsurance programs have limits beyond which the remaining obligation returns to the primary carrier”).

¹⁴⁰ Estimates of aggregate loss arising from NBCR events have exceeded amounts well in excess of the \$100 billion aggregate limit provided for under TRIP. See, e.g., PWG, *2006 Terrorism Risk Insurance Report*, 72-73 (noting estimates of modeled NBCR event exposures up to \$158 billion in property losses and \$484 billion in workers' compensation losses); Charles Meade and Roger C. Molander, *Considering the Effects of a Catastrophic Terrorist Attack*, RAND Corporation (2006), 6-7 (estimating potential losses arising from explosion of 10-kiloton nuclear bomb in a shipping container as exceeding \$1 trillion), http://www.rand.org/content/dam/rand/pubs/technical_reports/2006/RAND_TR391.pdf.

¹⁴¹ See AIA/NAMIC/PCI Comments, 5 (“The terrorism risk posed to workers' compensation insurers, and their inability to limit their exposure to that risk, inevitably lead them to circumscribe their own capacity to accept workers' compensation risks. This in turn can create economic challenges for employers that must have available and affordable workers' compensation coverage.”).

As reflected in Figure 2, workers' compensation is the largest TRIP-eligible line of insurance by total DEP. It is also the largest TRIP-eligible line of insurance by the total amount of terrorism risk insurance premiums charged by non-small and small insurers, as reflected in Figure 46.

**Figure 46: Terrorism Risk Insurance Premiums by TRIP-Eligible Line of Insurance
(Non-Small and Small Insurers)**

	2016		2017	
	Terrorism Risk Insurance Premiums	Percentage of Total Terrorism Risk Insurance Premiums	Terrorism Risk Insurance Premiums	Percentage of Total Terrorism Risk Insurance Premiums
Aircraft (all perils)	\$ 14,636,357	0.5%	\$ 15,674,690	0.6%
Allied Lines	136,581,109	5.1%	109,675,979	4.2%
Boiler and Machinery	23,348,707	0.9%	17,423,611	0.7%
Comm. Multi-Peril (liab.)	123,365,098	4.6%	153,486,234	5.9%
Comm. Multi-Peril (non-liab.)	559,716,442	21.0%	510,637,056	19.5%
Excess Workers' Comp.	17,762,794	0.7%	24,204,008	0.9%
Fire	154,498,539	5.8%	154,064,588	5.9%
Inland Marine	81,211,769	3.0%	68,855,722	2.6%
Ocean Marine	12,046,579	0.5%	10,583,944	0.4%
Other Liability	409,952,955	15.4%	392,039,298	15.0%
Products Liability	25,092,928	0.9%	28,985,257	1.1%
Workers' Compensation	1,107,334,593	41.5%	1,132,898,363	43.3%
Total	\$ 2,665,547,870	100.0%	\$ 2,618,528,751	100.0%

Source: 2017 and 2018 TRIP data calls

VIII. TERRORISM RISK PREMIUMS EARNED OVER TIME

Under the 2015 Reauthorization Act, Treasury is directed to provide in each Effectiveness Report an estimate of the total amount of premiums earned on terrorism risk insurance since January 1, 2003.¹⁴⁶

A. Non-Small and Small Insurers

In the 2016 Effectiveness Report, Treasury estimated that \$24.24 billion in terrorism risk insurance premiums were earned between 2003 and 2015.¹⁴⁷ Treasury's assessment was based upon: (1) historical data reported to A.M. Best between 2004 and 2013; and (2) the results of Treasury's voluntary 2016 TRIP data call.¹⁴⁸ Treasury noted at the time that comprehensive historical terrorism risk premium data did not exist, and that the report's estimate of earned premiums may have been understated.¹⁴⁹

Additional information now permits Treasury to further refine its earlier estimate from 2016. Treasury reviewed the most recent data from the sources noted above, as well as the historical responses received in the 2017 TRIP data call regarding total premiums earned during the period 2003 through 2016.¹⁵⁰

Treasury reviewed data reported by A.M. Best for written premiums¹⁵¹ in the years 2004 through 2016. A.M. Best collects and analyzes terrorism premium information through its Supplemental Rating Questionnaire.¹⁵² Although the A.M. Best data encompasses the vast majority of the terrorism insurance market,¹⁵³ not every insurer (such as alien surplus lines and captive insurers) is included in the A.M. Best data, and of those which were included, not all responded to the Supplemental Rating Questionnaire. As reported in the 2016 Effectiveness Report, the data

¹⁴⁶ TRIA § 104(h)(2)(E).

¹⁴⁷ FIO, *2016 Effectiveness Report*, 25-26.

¹⁴⁸ This included an estimate of \$1.5 billion for CY 2003, which was based principally upon a prior Treasury report. The premium estimate was based upon nominal dollars as earned in each year. FIO, *2016 Effectiveness Report*, 25-26.

¹⁴⁹ FIO, *2016 Effectiveness Report*, 9, 26.

¹⁵⁰ Data on terrorism risk insurance premiums earned by captive insurers is only available in the results of the 2017 and 2018 TRIP data calls, and is not included in other Treasury estimates nor in the A.M. Best data. As discussed above, the analysis of captive insurers is discussed separately in Section VI.B.

¹⁵¹ Under the 2015 Reauthorization Act, Treasury is instructed to provide updated estimates of total earned premiums (as distinguished from total written premiums) over the period from January 1, 2003. Although in any given year there will be some discrepancy between earned premiums and written premiums, over time on an aggregated basis the difference is unlikely to be significant.

¹⁵² Treasury appreciates the willingness of A.M. Best to provide and interpret this data.

¹⁵³ FIO, *2016 Effectiveness Report*, note 76.

provided by A.M. Best, while likely an understatement of total written terrorism risk premiums, provides informative context. Figure 48 arrays the information supplied by A.M. Best.

Figure 48: Written Terrorism Risk Insurance Premiums (2003-2016)¹⁵⁴

Year	Terrorism Written Premiums (\$ billions)
2003	\$1.500 (est.)
2004	\$ 1.968
2005	1.989
2006	1.902
2007	2.049
2008	2.012
2009	1.748
2010	1.609
2011	1.652
2012	1.663
2013	1.801
2014	1.658
2015	1.702
2016	1.717
Total:	\$ 24.97

Source: 2016 Effectiveness Report,
A.M. Best Company Supplemental Rating Questionnaire

Treasury next analyzed the results of the 2017 and 2018 TRIP data calls, both of which had very high response rates for all insurer categories, as discussed above. Figure 49 provides information on terrorism risk insurance premiums earned by non-small and small insurers in 2016 and 2017 based on the 2017 and 2018 TRIP data calls, and the percentage of total TRIP-eligible DEP represented by that figure.

Figure 49: Terrorism Risk Insurance DEP, Non-Small and Small Insurers

	2016		2017	
	Terrorism Risk Insurance Premiums	% of Category's TRIP-Eligible DEP	Terrorism Risk Insurance Premiums	% of Category's TRIP-Eligible DEP
Non-Small Insurers	\$ 2,479,359,650	1.5%	\$ 2,415,613,573	1.4%
Small Insurers	186,188,220	0.9%	202,915,178	1.9%
Total	\$ 2,665,547,870	1.4%	\$ 2,618,528,751	1.5%

Source: 2017 and 2018 TRIP data calls

The information reported to Treasury in the 2017 TRIP data call indicated a total of \$2.7 billion in terrorism risk premiums earned by non-small and small insurers in 2016, while \$1.7 billion in

¹⁵⁴ The 2016 Effectiveness Report included an estimate for 2003 premium that is replicated here, in addition to the written premium data reported to A.M. Best between 2004 and 2016. See FIO, *2016 Effectiveness Report*, 25.

written premiums was reported to A.M. Best for the same period. This indicates that the information reported by insurers to A.M. Best likely underrepresents the total domestic admitted market. That disparity between the two sets of data is generally confirmed by the results of the 2018 data call, in which 2017 earned terrorism risk premiums reported for non-small and small insurers were similar to the earned amounts reported for 2016.

In addition to requesting 2016 terrorism risk premium information in the 2017 TRIP data call, Treasury also requested that responding insurers report all terrorism risk insurance premiums earned between 2003 and 2016. Many insurers were unable to provide this level of historical data.¹⁵⁵ Based on this incomplete metric Treasury estimates that the total terrorism risk premiums earned by non-small and small insurers between 2003 and 2016 is \$37.2 billion.

After analyzing all of the information provided above, and recognizing the inherent limitations of this data, Treasury estimates that the terrorism risk insurance premiums earned by non-small and small insurers during the period 2003 to 2016 falls between \$37.2 billion (as determined based on the information report in the 2017 TRIP data call) and \$25 billion, as reported over time to A.M. Best. An appropriate estimate based on these data is \$33 billion.¹⁵⁶

Adding the 2003-2016 estimated figure of \$33 billion to the 2017 premium information received in the 2018 TRIP data call (\$2.598 billion), Treasury estimates that approximately \$35.6 billion in terrorism risk insurance premiums were earned by non-small and small insurers between 2003 and 2017.

B. Alien Surplus Lines Insurers

Figure 50 provides information on terrorism risk insurance premiums earned by alien surplus lines insurers in 2016 and 2017 based on the 2017 and 2018 TRIP data calls, and the percentage of total TRIP-eligible DEP represented by that figure.

Figure 50: Terrorism Risk Insurance DEP, Alien Surplus Lines Insurers

	2016		2017	
	Terrorism Risk Insurance Premiums	% of Category's TRIP-Eligible DEP	Terrorism Risk Insurance Premiums	% of Category's TRIP-Eligible DEP
Alien Surplus Lines Insurers	\$ 141,576,402	1.9%	\$ 200,586,281	2.1%

Source: 2017 and 2018 TRIP data calls

Treasury estimates that approximately 23 percent of the alien surplus lines market provided credible estimates for total terrorism risk insurance premiums earned between 2003 and 2015.

¹⁵⁵ After accounting for data that could not be reported, and inconsistent data reported by insurers, Treasury estimates that only 18 percent of the domestic admitted market provided credible information from which projections could be made.

¹⁵⁶ Calculated as $(.333 \times \$25 \text{ billion}) + (.667 \times \$37.2 \text{ billion}) = \33 billion .

Based upon the foregoing, and subject to the same inherent limitations in the data as observed in connection with the information produced by non-small and small insurers, Treasury estimates that \$1.8 billion in terrorism risk premiums were earned by alien surplus lines insurers between 2003 and 2016. When the reported amount for 2017 is included, a total amount of \$2.0 billion in earned terrorism risk insurance premiums is indicated for alien surplus lines insurers for the entire period from 2003 through 2017.

C. Captive Insurers

Figure 51 provides information on terrorism risk insurance premiums earned by captive insurers in 2016 and 2017 based on the 2017 and 2018 TRIP data calls, and the percentage of total TRIP-eligible DEP represented by that figure.

Figure 51: Terrorism Risk Insurance DEP, Captive Insurers¹⁵⁷

	2016		2017	
	Terrorism Risk Insurance Premiums	% of Category's TRIP-Eligible DEP	Terrorism Risk Insurance Premiums	% of Category's TRIP-Eligible DEP
Captive Insurers	\$ 756,008,378	15.9%	\$ 835,818,150	9.2%

Source: 2017 and 2018 TRIP data calls

Many captive insurers did not report their total collected terrorism risk insurance premiums dating back to 2003; however, those that could provide credible estimates represented 43 percent of the market reflected in the 2017 TRIP data call. Subject to the same data limitations observed above, Treasury estimates based upon this information that the total terrorism risk premiums earned by captive insurers from 2003 through 2016 is approximately \$6.6 billion. When the reported amount for 2017 is included, a total amount of \$7.4 billion in earned terrorism risk insurance premiums is indicated for captive insurers for the entire period from 2003 through 2017.

D. Aggregate Industry Totals

Using the estimates provided above for the years 2003 through 2015, coupled with the data reported for 2016 and 2017, Treasury estimates that, in the aggregate, as much as \$38 billion was earned by non-small, small, and alien surplus lines insurers, with an additional \$7.4 billion earned by captive insurers. In the case of the information provided by the domestic admitted market, this represents between 1 and 2 percent of total TRIP-eligible lines premiums earned

¹⁵⁷ The differential between the captive insurer terrorism risk insurance premium figures for 2016 and 2017 is largely accounted for by the fact that Treasury did not collect terrorism risk insurance premiums associated with deductible reimbursement policies in the 2017 TRIP data call. Those amounts, however, are included within the overall captive insurer premium estimates provided by the 43 percent of all captive insurers that were able to provide that information.

over the entire period.¹⁵⁸ This amount of terrorism risk premiums earned over a 15-year period is comparable to the loss sustained by the insurance industry (without the support of the Program) in connection with the September 11 attacks.

Because repeated, identical requests for the same historical data going forward are unlikely to result in any different or better information, Treasury discontinued the request for historical premium data beginning with the 2018 TRIP data call. Estimates of total earned premiums over time in future reports likely will be based upon the total earned premiums figure of \$37.6 billion (or \$45 billion including captive insurer premiums) provided in this Report and updated with the most recent year's annual TRIP-eligible DEP figures as reported to Treasury in future data calls.

¹⁵⁸ Although no acts of terrorism have been certified by the Secretary since the inception of the Program, commenters have noted that “premium dollars collected by insurers for terrorism [do] not distinguish between certified and non-certified events, and insurers have, in fact, paid claims for terrorism losses despite the program not being triggered.” AIA/NAMIC/PCI Comments, 3-4; *see also* Marsh Comments, 3.

IX. CONCLUSION

The Program has accomplished the principal goals identified in TRIA. The September 11 attacks severely limited the availability and affordability of terrorism risk insurance and reinsurance. In turn, the lack of available coverage threatened economic activity due to insurance preconditions for certain business activities.

The Program has made terrorism risk insurance available and affordable in the United States, and the market for terrorism risk insurance has been relatively stable for the past decade. While the purchase of terrorism risk insurance is not mandated by the Program, a significant proportion of commercial policyholders nationwide have elected to obtain such insurance, and take-up may be even higher in metropolitan areas at greater risk of terrorism. The Program also provides support for significant P&C insurance exposures across the country. The majority of the risks covered by disclosed limits of liability are outside the largest metropolitan areas in the United States.

In terms of the insurer categories participating in TRIP, larger U.S. domiciled insurers (or non-small insurers) insure the bulk of the risk to which the Program is exposed. However, small, alien surplus lines, and captive insurers each constitute significant components of the entire market. Although each is impacted differently by their participation in the Program, the market generally appears to work well, and provides commercial insurance buyers with a variety of options to obtain coverage for terrorism risk exposures.

Private reinsurance of terrorism risk has significantly increased under the Program, and there is now increased private reinsurance capacity for the exposures that remain wholly with the private market under TRIP. Nonetheless, there remains uncertainty that private reinsurance capacity exists for all exposures currently covered by the Program, as is reflected in the limited amount of reinsurance available for NBCR events, which pose the greatest risk of causing catastrophic industry losses on a broad scale. Furthermore, available reinsurance is much more heavily concentrated in those layers above a participating insurer's TRIP deductible – by which point the insurer has already sustained a significant loss as measured by its total premiums in the TRIP-eligible lines of insurance.

Terrorism is caused by deliberate acts that may be expressly calculated to avoid or negate measures taken to mitigate against potential terrorist attacks and damages. Modeling techniques have improved significantly in the area of predicting loss exposures in response to specific events, which allows insurers to better manage their underwriting exposure. However, models remain relatively unsophisticated in their predictive capabilities, due to the calculated nature of terrorism and limited frequency of events. Most countries with substantial insurance markets have adopted some sort of terrorism risk program that relies (to a greater or lesser degree) upon government involvement in the event of a significant terrorism event.¹⁵⁹

¹⁵⁹ See generally International Forum for Terrorism Risk (Re)Insurance Pools (IFTRIP) (organization of international terrorism risk insurance programs, providing general information and news), <http://iftrip.org/>;

This analysis is based principally on two years of complete industry data received by Treasury from insurers. Treasury will continue to analyze this collected data, continue to collect data on an annual basis, and provide further reports as required by the 2015 Reauthorization Act.

“National Terrorism Risk Insurance Programmes of OECD Countries with Government Participation,” Organisation for Economic Co-Operation and Development (OECD) International Platform on Terrorism Risk Insurance (summarizing salient features of terrorism risk programs in OECD countries), <https://www.oecd.org/daf/fin/insurance/Terrorism-Risk-Insurance-Country-Comparison.pdf>.