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 Act, as amended

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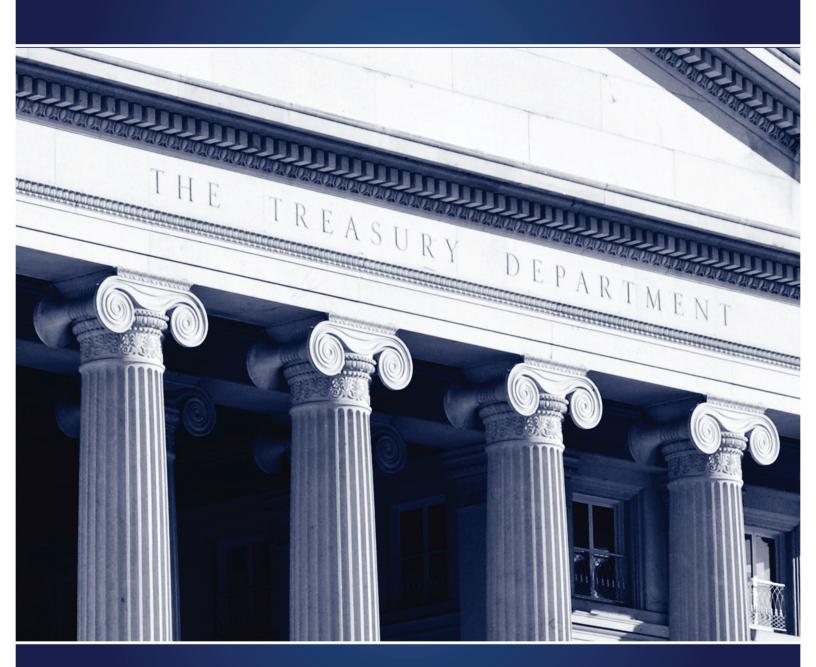




Table of Contents

I. I	NTRODUCTION AND EXECUTIVE SUMMARY	1
II. B	BACKGROUND	3
I. INTRODUCTION AND EXECUTIVE SUMMARY. II. BACKGROUND	5	
IV. I	DATA COLLECTION	9
A.	Data Collection Process	9
В.	Responding Insurer Categories	. 10
C.	Response Rate	. 12
D.	Data Quality Evaluation	. 13
V. A	ANALYSIS OF THE OVERALL EFFECTIVENESS OF THE PROGRAM	. 15
A.	Availability of Terrorism Risk Insurance	. 16
B.	Affordability of Terrorism Risk Insurance	. 18
	Embedded Terrorism Risk Insurance	. 18
	2. Standalone Terrorism Risk Insurance	. 26
C.	Take-Up Rates for Terrorism Risk Insurance	. 28
D.	Availability and Affordability of Terrorism Risk Insurance for Places of Worship	. 40
E.	Private Reinsurance Availability	. 42
F.	Projections from Modeled Loss Questions	. 49
G.	Terrorism Risk Insurance for Cyber Losses	. 55
	1. The Cyber Insurance Market	. 56
	2. Analysis of Data Call Information	. 57
	3. Application of TRIP to Cyber Terrorism Losses	. 60
VI. A	ADDITIONAL ANALYSIS ON INSURER CATEGORIES	. 63
A.	Small Insurers	. 63
B.	Captive Insurers	. 64
C.	Alien Surplus Lines Insurers	. 70
VII.	WORKERS' COMPENSATION	. 73
VIII	. TERRORISM RISK PREMIUMS EARNED OVER TIME	. 77
A.	Non-Small and Small Insurers	. 77
B.	Alien Surplus Lines Insurers	. 77
C.	Captive Insurers	. 78
D.	Aggregate Industry Totals	. 78

IX. Al	DVISORY COMMITTEE ON RISK-SHARING MECHANISMS	79
A.	Background	79
B.	ACRSM Report Findings	79
C.	ACRSM Report Recommendations	80
D.	ACRSM Report and Treasury's Next Steps	81
X. C	ONCLUSION	82
APPE	ENDIX 1: 2019 TAKE-UP RATES BY STATE	83
APPE	ENDIX 2: 2019 TAKE-UP RATES BY STATE AND LINE GROUPS	85

Glossary

2005 Extension Act	 Terrorism Risk Insurance Extension Act of 2005, Pub. L. 109-144, 119 Stat. 2660
2007 Reauthorization Act	 Terrorism Risk Insurance Program Reauthorization Act of 2007, Pub. L. 110-160, 121 Stat. 183
2015 Reauthorization Act	 Terrorism Risk Insurance Reauthorization Act of 2015, Pub. L. 114-1, 129 Stat. 3
2016 Effectiveness Report	 FIO, Report on the Overall Effectiveness of the Terrorism Risk Insurance Program (June 2016)
2017 Small Insurer Study	 FIO, Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace (June 2017)
2018-2020 TRIP data calls	 TRIP data calls performed in 2018, 2019, and 2020 (collecting data for the years 2017, 2018, and 2019, respectively)
2018 Effectiveness Report	 FIO, Report on the Overall Effectiveness of the Terrorism Risk Insurance Program (June 2018)
2019 Reauthorization Act	 Terrorism Risk Insurance Program Reauthorization Act of 2019, Pub. L. 116-94, 133 Stat. 2534
2019 Small Insurer Study	 FIO, Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace (June 2019)
ACRSM	 Advisory Committee on Risk-Sharing Mechanisms
ACRSM Report	 Report of the Advisory Committee on Risk-Sharing Mechanisms (May 2020)
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) and regulated by the captive insurance laws of a particular state jurisdiction
CMP	 Commercial Multi-Peril
Co-Pay Share	 The percentage of losses that an insurer is obligated to pay after meeting its deductible and the Program Trigger is satisfied. The federal government is responsible for the remaining percentage of losses above the insurer's deductible. The co-pay share for 2019 was 19 percent

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 2019 was 81 percent.
FIO	 Federal Insurance Office
GAO	 U.S. Government Accountability Office
IMARA	 Insurance Marketplace Aggregate Retention Amount
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-Small Insurer	 Domestic insurers or groups 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
PWG	 President's Working Group on Financial Markets
Report	 FIO, Report on the Overall Effectiveness of the Terrorism Risk Insurance Program (June 2020)
Standalone Policy	 Insurance policy which provides coverage only for terrorism risk
Secretary	 Secretary of the Treasury
September 11 Attacks	 Terrorist attacks occurring on September 11, 2001

Small Insurer	•••••	An insurer as defined under 31 C.F.R. § 50.4(z)
Take-Up Rate		Extent to which terrorism risk insurance is purchased by policyholders
Treasury		U.S. Department of the Treasury
TRIA		Terrorism Risk Insurance Act of 2002, as amended
TRIP		Terrorism Risk Insurance Program (also, Program)
TRIP-Eligible DEP		DEP earned within the TRIP-eligible lines of insurance
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 Act of 2002, as amended (TRIA),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 required report under TRIA must be submitted no later than June 30, 2020, and must include:

- (1) "an analysis of the overall effectiveness of the Program;"
- (2) "an evaluation of the availability and affordability of terrorism risk insurance, which shall include an analysis of such availability and affordability specifically for places of worship;"
- (3) "an evaluation of any changes or trends in the data collected" by the Secretary;
- (4) "an evaluation of whether any aspects of the Program have the effect of discouraging or impeding insurers from providing commercial property casualty insurance coverage or coverage for acts of terrorism;"
- (5) "an evaluation of the impact of the Program on workers' compensation insurers;" and
- (6) "an updated estimate of the total amount" of terrorism risk insurance premiums "earned since January 1, 2003." 3

TRIA 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 five data calls—a voluntary data call in 2016 seeking calendar year 2015 data, and four mandatory data calls in 2017, 2018, 2019, and 2020 requiring, respectively, the production of 2016, 2017, 2018, and 2019 calendar year data. This report (Report) addresses the six

https://home.treasury.gov/system/files/311/2016_TRIP_Effectiveness_%20Report_FINAL.pdf (2016 Effectiveness Report). Treasury published the second Effectiveness Report in June 2018. https://home.treasury.gov/system/files/311/2018 TRIP_Effectiveness Report.pdf (2018 Effectiveness Report). This Report is the third Effectiveness Report published by Treasury.

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

² Beginning in 2016, the Secretary was required to submit a report to the Committee of 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. 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),

³ TRIA § 104(h)(2).

^{11(111 § 104}

statutory considerations identified above, and uses the 2018 through 2020 TRIP data calls (2018-2020 TRIP data calls) to comply with the requirements of TRIA.⁵

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

- (1) The Program generally has been effective in achieving the goals identified by TRIA. Refer to Sections V, VI, and VII.
- (2) Terrorism risk insurance has generally been available and affordable over the past three years. Information from 2019 reflects that places of worship take up terrorism risk insurance at a higher percentage than do businesses in other industry segments, although for a somewhat higher percentage amount of the total policy premium. Refer to Section V.D.
- (3) The market for terrorism risk insurance has been relatively stable over the last three years, with few observable differences in relevant benchmarks, such as price and take-up rate. Refer to Sections V, VI, and VII.
- (4) 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 commercial property and casualty (P&C) insurance in general, or coverage for acts of terrorism specifically. Refer to Sections V, VI, and VII.
- (5) The Program continues to serve 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.
- (6) Treasury's estimate of total direct earned premiums for terrorism risk insurance from 2003 through 2019 is approximately \$43.2 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.

The Report also addresses the recommendations of the Advisory Committee on Risk-Sharing Mechanisms (ACRSM).

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⁵ Given the timing of the relevant data calls, none of the data analyzed by Treasury in this Report reflects insurance industry impacts associated with COVID-19 in 2020.

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 more than \$45 billion of insurance losses, 6 more than two-thirds of which were reimbursed by reinsurers to insurers.⁷ Following the September 11 attacks, insurers and reinsurers began to exclude coverage for terrorism risk from commercial P&C policies.

TRIA was enacted in 2002, 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."8 TRIA established TRIP, which requires insurers to make terrorism risk coverage available within certain lines of commercial P&C insurance (TRIP-eligible lines of insurance).⁹ To assist insurers with the resulting potential financial exposure, certain insurance losses are eligible for reimbursement through the Program if they result from an "act of terrorism" as defined by TRIA and certified by the Secretary. 10 The Program is housed in Treasury and administered by the Secretary with the assistance of the Federal Insurance Office (FIO). 11

TRIA originally authorized the Program for a three-year period ending December 31, 2005. The Program has since been reauthorized four times, ¹² most recently by the Terrorism Risk Insurance Program Reauthorization Act of 2019 (2019 Reauthorization Act), which extended the Program through December 31, 2027. Changes enacted in Program reauthorizations, coupled with increases in the insurance industry premium base over time, have generally reduced potential federal exposure to insured losses and increased private market exposure.

⁸ TRIA § 101(a)(5).

⁶ Insured losses shown in inflation-adjusted 2019 dollars. See Testimony of Baird Webel, Congressional Research Service, before the House Financial Services Committee, Subcommittee on Housing, Community Development, and Insurance (Oct. 16, 2019), 1, https://financialservices.house.gov/uploadedfiles/hhrg-116-ba04-wstate-webelb-20191016.pdf (CRS Testimony).

⁷ "9/11 and Insurance: The Eight Year Anniversary," *Insurance Journal*, September 11, 2009, http://www.insurancejournal.com/news/national/2009/09/11/103694.htm.

⁹ 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) (2019). 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) (2019).

¹⁰ Further details concerning the operation of the Program are provided in Section III of this Report.

¹¹ Federal Insurance Office Act of 2010, 31 U.S.C. § 313(c)(1)(D) (2012).

¹² 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); Terrorism Risk Insurance Reauthorization Act of 2015, Pub. L. 114-1, 129 Stat. 3 (2015); Terrorism Risk Insurance Program Reauthorization Act of 2019, Pub. L. 116-94, 133 Stat. 2534 (2019).

TRIA provides that the Secretary shall annually 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 2018-2020 TRIP data calls are discussed in Section IV.

¹³ TRIA § 104(h)(1).

¹⁴ TRIA §§ 104(h)(1)(A)-(G).

III. TRIP OVERVIEW

The Program requires that each entity meeting the definition of an insurer make available coverage for insured losses resulting from acts of terrorism.¹⁵ The mandatory offer required from participating insurers must "not differ materially from the terms, amounts, and other coverage limitations applicable to losses arising from events other than acts of terrorism." The "make available" requirement applies only to TRIP-eligible lines of insurance. Trail 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. 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 TRIA § 103(c). 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). The availability of private reinsurance for terrorism risk is discussed further in Section V.E.

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 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.

Payment to a participating insurer 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. Treasury's recovery of amounts expended are defined by the recoupment process, which will vary depending upon the Insurance Marketplace Aggregate Retention Amount (IMARA). 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: (1) the insurer's losses must exceed its deductible (as defined under the Program), and (2) 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 \$180 million in calendar year 2019 and rose to \$200 million in calendar year 2020. The Program Trigger will remain at \$200 million each year through the expiration of the Program in 2027.²⁶

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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 (2019).

²⁵ TRIA § 102(7).

²⁶ 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 it increased to \$100 million for losses occurring in 2007. When TRIP was reauthorized through 2014 in the 2007 Reauthorization Act, no change was made to the Program Trigger, which remained at \$100 million. The 2015 Reauthorization Act, however, provided for an annual increase in the Program Trigger of \$20 million beginning in 2016, until reaching \$200 million in 2020. Under the 2019 Reauthorization Act, the Program Trigger remains at \$200 million until the current expiration of the Program.

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

Federal Share of Compensation

After an insurer meets its deductible and the Program Trigger is satisfied, the federal government will pay a certain percentage of that insurer's losses in excess of the insurer's deductible. For calendar year 2019, the federal share of compensation was 81 percent of an insurer's losses above its deductible, with the insurer responsible for the remaining 19 percent. In 2020, the federal share of compensation decreased to 80 percent with an insurer share of 20 percent. This sharing ratio will remain at the 2020 levels until the Program expires in 2027.²⁷

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 and the federal government) from acts of terrorism which exceed the Program Cap of \$100 billion during any calendar year. ²⁸ 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. ²⁹

Recoupment

The Secretary will collect "terrorism loss risk-spreading premiums" from insurers if federal payments are made to insurers. Under this mechanism, known as recoupment, Program participants may be required to collect funds from policyholders by placing a surcharge on insurance policies written in TRIP-eligible lines. The surcharges will be set based upon the amount that must be recovered by Treasury and the time within which it must be recovered, as

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²⁷ TRIA § 103(e)(1)(A). One commenter stated that Treasury should evaluate whether the Program is appropriately structured to avoid double recovery payments resulting from other federal programs and TRIP. The commenter assumes that existing or potential future federal programs also allow recovery associated with an act of terrorism under TRIA. *See* CBI Duplicative Compensation Comments. TRIA prohibits payments associated with the Program where the policyholder in question has received compensation through another federal program. TRIA § 103(e)(1)(C); *see also* 31 C.F.R. § 50.71(b)(2) (specifying obligations upon insurer to assess entitlement of policyholder to payments from other federal programs); Form TRIP 02C (Schedule C – Bordereau), https://home.treasury.gov/system/files/311/TRIP02C.pdf (TRIP claim form containing fields requiring disclosure of entitlement of policyholder to other federal payments, which could result in subtraction from claim for the federal share of compensation). The Program mechanisms contemplate the issues raised by potential double recoveries, and Treasury will continue to evaluate whether additional procedures should be implemented regarding the prohibition on double recoveries.

²⁸ TRIA § 103(e)(2)(A).

²⁹ TRIA requires the Secretary to notify Congress if insured losses are projected to exceed the Program Cap and in that case for the Secretary to determine the pro rata share of insured losses to be paid by each affected insurer. TRIA §§ 103(e)(2)-(3).

required by TRIA. Insurers must then remit these surcharges to the Secretary.³⁰ The requirement to collect, or recoup, terrorism loss risk-spreading premiums applies not only to insurers that received federal payments under the Program, but also to all insurers writing policies in TRIP-eligible lines of insurance. Surcharges are placed on all TRIP-eligible insurance policies regardless of whether the policyholder purchased terrorism risk insurance.³¹

IMARA

TRIA provides that recoupment under the Program may be mandatory or subject to the Secretary's discretion. This determination depends on how any federal payments under TRIP compare with the total insured losses paid by participating insurers. Mandatory recoupment occurs where total industry payments are below the IMARA, which is calculated annually by Treasury based upon its annual TRIP data calls, and is the annual aggregate average of insurer deductibles over the prior three-year period. For purposes of calendar year 2020, the IMARA is \$40.9 billion. In connection with amounts subject to mandatory recoupment, Treasury must collect 140 percent of total amounts expended.

³⁰ TRIA §§ 103(e)(7)-(8).

³¹ TRIA, § 103(e)(8).

³² See 31 C.F.R. § 50.4(m)(2) (2019).

³³ *See* IMARA Calculation for Calendar Year 2020 under the Terrorism Risk Insurance Program, 84 Fed. Reg. 69462 (December 18, 2019).

³⁴ See TRIA §§ 103(e)(7)-(8).

IV. DATA COLLECTION

Treasury used the data from the 2018-2020 TRIP data calls as one of the main bases upon which to draw conclusions respecting the effectiveness of the Program. This section explains the FIO data collection process, the categories of insurers who responded to the data call, and how FIO evaluated the quality of the data.

A. Data Collection Process

This Report is based primarily on the results of Treasury's 2018-2020 TRIP data calls and FIO's administration of the Program. In addition, Treasury performed qualitative research and sought input from stakeholders, including insurers, state insurance regulators, the National Association of Insurance Commissioners (NAIC), policyholders, and the general public, through a Federal Register Notice seeking comments.³⁵ Treasury also reviewed publicly available data reported by insurers to state regulators.

The 2018-2020 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.³⁶

Treasury collected data on a group basis (combining affiliated companies) because TRIP is generally administered on a group basis.³⁷ The information collected included data concerning premiums, policy exposures, policyholder take-up rates, and reinsurance.³⁸ Treasury collected information from four insurer categories: (1) alien surplus lines insurers, (2) captive insurers, (3) non-small insurers (or larger licensed insurers above the small insurer threshold); and (4) small

³⁵ See 2020 Report on the Effectiveness of the Terrorism Risk Insurance Program, 85 Fed. Reg. 23435 (April 27, 2020). Treasury received nine responsive comments addressing the Program, from: Centers for Better Insurance LLC (Captive Insurers) (CBI Captive Insurer Comments); Centers for Better Insurance LLC (Compliance Risks) (CBI Compliance Comments); Marsh & McLennan Companies (Marsh Comments); Centers for Better Insurance LLC (Prohibition on Duplicative Compensation) (CBI Duplicative Compensation Comments); Vermont Captive Insurance Association (VCIA Comments); Centers for Better Insurance LLC (Framework for Conducting the GAO Cyber Risk Study) (CBI GAO Cyber Comments); National Council on Compensation Insurance (NCCI Comments); Reinsurance Association of America (RAA Comments); Lloyd's of London (Lloyd's Comments); and Coalition to Insure Against Terrorism (CIAT Comments). All comments are available at https://www.regulations.gov/docket?D=TREAS-TRIP-2020-0010.

³⁶ Treasury estimates that insurers eligible for this reporting exception (approximately 400 insurers in total) represented less than 0.5 percent of the TRIP-eligible lines premium market for each TRIP data call between 2018 and 2020. *See* S&P Global Market Intelligence (as of June 4, 2020).

³⁷ 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) (2019). 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 (2019). Insurer groups may include both domestic insurers and foreign insurers that write business in the United States only on a surplus lines basis.

³⁸ See Annual Data Reporting, 31 C.F.R § 50.51(b) (2019).

insurers.³⁹ Each insurer category completes a different reporting template that is tailored to that category.

Treasury collected data through a third-party insurance statistical aggregator, as required by TRIA.⁴⁰ The statistical aggregator provided results to Treasury in an aggregated, anonymous format that did not identify any individual 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 began annually collecting data relating to terrorism risk insurance in 2016. The state insurance regulator data calls 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, Treasury and state insurance regulators developed, beginning in 2018, 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 significantly reduces burdens on insurers required to report information to both Treasury and state insurance regulators.

The 2020 TRIP data call added a new worksheet addressing terrorism risk insurance obtained by places of worship, in order to address a new reporting requirement under the 2019 Reauthorization Act. 42

В. **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. The categories include insurers that are "admitted" or licensed to write business in at least one U.S. jurisdiction, 43 and domestic and

³⁹ 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) (2019). See also FIO, U.S. Department of the Treasury, Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace (2019), 9-10, https://home.treasury.gov/system/files/311/2019 TRIP SmallInsurer Report.pdf (2019 Small Insurer Study).

⁴⁰ TRIA § 104(h)(3). The data aggregator for the 2018-2020 TRIP data calls was Insurance Services Office, Inc.

⁴¹ See 2018 Effectiveness Report, 10-11.

⁴² TRIA, § 104(h)(2); 2019 Reauthorization Act, § 502(c)(2).

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.

foreign insurers that have been permitted as a matter of state law to write U.S. business on a surplus lines basis. 44

In 2020, the four insurer categories required to report information were as follows:

- (1) **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.
- (2) **Captive Insurers:** Insurers formed to insure the risk exposures of their policyholder owners and regulated by the captive insurance laws of a particular state jurisdiction. Captive insurers are discussed in further detail in Section VI.B.
- (3) **Non-Small Insurers:** Domestic insurers or groups (including affiliated alien surplus lines insurers) with either DEP in TRIP-eligible lines of insurance (TRIP-eligible DEP) above the small insurer threshold or a policyholder surplus above the small insurer threshold.
- (4) **Small Insurers:** Domestic insurers or groups (including affiliated alien surplus lines insurers) with *both* 2018 DEP in TRIP-eligible lines of insurance of less than \$900 million *and* a 2018 policyholder surplus of less than \$900 million (subject to the reporting exception for insurers with less than \$10 million in TRIP-eligible DEP). The small insurer threshold is calculated annually in relation to the Program Trigger amount. Small insurers are discussed in further detail in Section VI.A.

Figure 1 shows insurer participation by category, as indicated by reported TRIP-eligible DEP.

Figure 1: TRIP-Eligible DEP by Insurer Category (\$ billions)⁴⁶

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	2018 TRIP data call		2019 TRIP o	2019 TRIP data call		ata call
	2017 TRIF	P- % of	2018 TRIP-	% of	2019 TRIP-	% of
	Eligible DE	P Total	Eligible DEP	Total	Eligible DEP	Total
Alien Surplus Lines Insurers	\$ 9.5	5%	\$ 7.6	4%	\$ 11.1	5%
Captive Insurers	9.3	4%	8.9	4%	9.0	4%
Non-Small Insurers	163.7	80%	166.2	81%	171.4	80%
Small Insurers	21.7	11%	22.5	11%	22.7	11%
Total	\$ 204.2	100%	\$ 205.2	100%	\$ 214.3	100%

Source: 2018-2020 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. For a breakdown of the terrorism risk insurance premium component of these premiums, see Figure 48 (Section VII).

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* 31 C.F.R. § 50.4(o)(1)(i)(B). *See also* "Glossary of Insurance Terms," NAIC, http://www.naic.org/consumerglossary.htm.

⁴⁵ See FIO, 2019 Small Insurer Study, 9.

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

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

	2018 TRIP d	ata call	2019 TRIP d	ata call	2020 TRIP data call	
	2017 TRIP-		2018 TRIP-		2019 TRIP-	
	Eligible	% of	Eligible	% of	Eligible	% of
	DEP	Total	DEP	Total	DEP	Total
Aircraft (all perils)	\$ 1.4	1%	\$ 1.4	1%	\$ 1.6	1%
Allied Lines	6.0	3%	6.7	4%	7.3	4%
Boiler and Machinery	1.4	1%	1.6	1%	1.6	1%
Commercial Multiple Peril (liab.)	13.7	7%	14.1	7%	14.7	8%
Commercial Multiple Peril (non-liab.)	22.4	12%	24.1	13%	26.5	14%
Excess Workers' Compensation	1.2	1%	1.2	1%	1.2	1%
Fire	8.9	5%	9.3	5%	9.8	5%
Inland Marine	14.6	8%	15.2	8%	12.9	7%
Ocean Marine	2.2	1%	2.5	1%	2.8	1%
Other Liability	42.5	23%	43.2	23%	47.2	24%
Products Liability	3.0	2%	3.5	2%	3.7	2%
Workers' Compensation	68.2	37%	66.0	35%	64.8	33%
Total	\$ 185.5	100%	\$ 188.7	100%	\$ 194.1	100%

Source: 2018-2020 TRIP data calls

C. Response Rate

Treasury estimates that the response rate for domestic insurers in the 2020 TRIP data call (measured by TRIP-eligible DEP) was at least 99 percent for non-small insurers, and at least 78 percent for small insurers. Treasury estimates that approximately 100 percent of non-small insurers and at least 87 percent of small insurers reported in the 2019 TRIP data call. Treasury estimates that at least 99 percent of non-small insurers and at least 85 percent of small insurers reported in the 2018 TRIP data call ⁴⁷

Treasury estimates that between 85 to 95 percent of alien surplus lines insurers responded to the 2018, 2019, and 2020 TRIP data calls.⁴⁸

Determining the response rate for captive insurers under TRIP is complicated by the fact that captive insurers typically do not submit publicly available information that could be used by Treasury to independently evaluate their response rate. Therefore, Treasury has consulted with state insurance regulators to help determine whether the appropriate number of captive insurers

⁴⁷ Treasury evaluates the response rates to the 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 the response rates in future reports.

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

reported for the TRIP data calls. ⁴⁹ Based upon the available information and the consistency of results year over year, Treasury estimates that the significant majority of captive insurers participating in the Program have provided information in response to the 2018-2020 TRIP data calls.

D. Data Quality Evaluation

This Report includes analysis of data for 2017 through 2019, relying on the results of the 2018-2020 TRIP data calls, with a particular focus on the 2019 and 2020 TRIP data calls conducted since Treasury's last Effectiveness Report. Treasury compared the results of its data calls with state reporting data for the same period to further validate the accuracy of reported data. The comparison between TRIP data calls and state reporting data is relevant because TRIP-eligible lines are defined by regulation with general reference to state insurance reporting lines.

The Program uses state-defined insurance lines and reporting data standards to determine the "property and casualty insurance" that is subject to the Program, which promotes efficient Program administration. This process also allows 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.⁵¹

Figure 3 compares the premiums reported to Treasury in the 2019 and 2020 TRIP data calls with the premiums reported by non-small and small insurers for state regulatory purposes. ⁵² Some adjustments are made to the state data to account for variations between certain state statutory reporting lines and the premiums that are subject to TRIP and collected by Treasury. ⁵³

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* 2020 Terrorism Risk Insurance Program Data Call, 85 Fed. Reg. 15036 (March 16, 2020).

⁵⁰ Some figures in this Report relating to the 2018 and 2019 TRIP data calls may not be identical to similar information previously reported by Treasury because of late-reported or corrected data submitted after publication of prior reports. Similarly, late-reported or corrected data received in the future in connection with the 2020 TRIP data call may result in future reporting by Treasury of information different from that reported here.

⁵¹ 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 addressed this adjustment process in prior reports. *See* FIO, *Study of Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace* (June 2017), 11, https://home.treasury.gov/system/files/311/Study_of_Small_Insurer_Competitiveness_in_the_Terrorism_Risk_Insurance_Marketplace_%28June_2017%29.pdf (2017 Small Insurer Study). Most alien surplus lines and captive insurers do not make such filings; therefore, this analysis does not extend to those Program participants.

⁵² Treasury performed this analysis in the 2018 Effectiveness Report, in connection with the data collected in the 2017 and 2018 TRIP data calls, and concluded that the data reported to Treasury was consistent with the more general information reported by those insurers for state regulatory purposes. FIO, 2018 Effectiveness Report, 15.

⁵³ 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 Non-Small Insurer ■ TRIP Small Insurer \$250 \$209 \$203 \$194 **FRIP-Eligible DEP (\$ billions)** \$189 \$200 \$150 \$100 \$50 \$-2018 2018 2019 2019 TRIP Data State Totals TRIP Data State Totals (adj) (adj)

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

Source: 2019 and 2020 TRIP data calls; S&P Global Market Intelligence as of May 16, 2020

Consistent with Treasury's previous findings, the data provided by reporting insurers in the 2019 and 2020 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.

TRIP, even though it is reported for state purposes under the Other Liability line of insurance, which is otherwise a TRIP-eligible line of insurance. *See* 31 C.F.R. § 50.4(w) (2019). Other small (and offsetting) differences arise from the manner in which Treasury collects data, which Treasury has addressed in prior reports. *See* FIO, 2018 *Effectiveness Report*, note 53.

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. ⁵⁴ Based on Treasury's analysis, the Program has been largely effective in meeting its statutory objectives. Terrorism risk insurance is available in the market for a relatively low cost and is purchased by the majority of commercial policyholders in the United States, including by the majority of places of worship. Private reinsurance capacity for terrorism risk insurance has increased since the creation of the Program. Stakeholders—representing the interests of insurers, reinsurers, and commercial policyholders—also state that the Program has been effective in achieving its statutory objectives. ⁵⁵ Treasury addresses these observations in more detail below, relying upon the data it has collected. Treasury then discusses the projections from modeled loss questions and terrorism risk insurance for cyber losses. ⁵⁶

The 2018-2020 TRIP data calls indicate that the market for commercial 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. Several 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 commercial P&C insurance generally and terrorism risk insurance in particular.⁵⁷

⁵⁴ TRIA §101(b).

⁵⁵ See note 35 (identifying commenters).

⁵⁶ TRIP is not the only national program or mechanism for terrorism risk insurance; many countries with substantial insurance markets have adopted some sort of terrorism risk insurance mechanism that relies (to a greater or lesser degree) upon government involvement in case of a significant terrorism event. *See generally* International Forum for Terrorism Risk (Re)Insurance Pools (IFTRIP), http://iftrip.org/ (organization of international terrorism risk insurance programs, providing general information and news); "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, https://www.oecd.org/daf/fin/insurance/Terrorism-Risk-Insurance-Country-Comparison.pdf (summarizing salient features of terrorism risk programs in OECD countries).

⁵⁷ See CRS Testimony, 4; Marsh Senate Testimony, 11 ("However, if TRIPRA is allowed to expire or renewed with significant modifications, it is likely that a large number of these types of employers will be forced to obtain [workers' compensation] coverage from assigned risk or residual markets, which are considered insurers of last resort."); VCIA Comments, 2 ("TRIA's initial goals were two-fold: (1) to make terrorism coverage available and (2) to ensure market stability in the aftermath of a large-scale terrorist event. TRIA has successfully achieved both these goals."); NCCI Comments, 4 ("Given the challenges presented by the terrorism peril, Congress determined a workable solution was needed that provides primary insurance carriers with a mechanism to manage the impact of the terrorism peril. That solution was the creation of TRIP and it appears it may have contributed to a relatively stable workers compensation market."); 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. Under TRIA and its extensions, the availability of terrorism risk insurance has increased."); Lloyd's Comments, 1 ("TRIP has been and remains quite effective and successful since its enactment. It serves its purpose of stabilizing the insurance market and the economy in times of uncertainty and provides for a smooth recovery in the event of a future terrorist attack."); CIAT Comments, 1 ("TRIP remains extremely effective in achieving its

As reported by certain observers, market fluctuations have taken place where the Program has lapsed or where there has been uncertainty over whether it would be reauthorized.⁵⁸

The Program mechanics—the amount of the Program Trigger, the individual insurer deductibles, and the co-pay shares—affect how the market for terrorism risk insurance now operates. ⁵⁹ Changes to the Program mechanics year over year as adopted in the 2015 Reauthorization Act have caused a continued shift of exposure from the public sector to the private market for terrorism risk insurance. Treasury has not observed any market disruption or impediments to participation caused by these changes to the Program mechanics. Although the 2019 Reauthorization Act did not modify any of the Program mechanics from those in place during calendar year 2020, any increases in industry premiums over time will result in a corresponding increase in industry and policyholder exposure. Treasury will continue to monitor and study this issue, as discussed further in this Report.

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

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primary purpose, which is to ensure the continued availability of terrorism coverage for commercial policyholders . . . 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.").

⁵⁸ Marsh Comments (TRIPRA's Early Renewal Keeps Terrorism Risk Insurance Market Stable) (January 2020), 1 ("Although short-lived, the expiration of the federal backstop at the end of 2014—and the uncertainty prior to its lapse—led to significant pricing increases for terrorism insurance buyers, as well as workers' compensation capacity concerns for organizations located in large metropolitan areas or with large concentrations of employees."). Commenters have cited in particular the inclusion of "springing exclusions" that would void coverage in the event TRIP was not reauthorized. *See* CRS Testimony, 4; CIAT Comments, 2; Testimony of Director Chlora Lindley-Myers, Missouri Department of Commerce and Insurance, on behalf of the NAIC, before the House Financial Services Committee, Subcommittee on Housing, Community Development, and Insurance (October 16, 2019), 2, https://financialservices.house.gov/uploadedfiles/hhrg-116-ba04-wstate-lindley-myersc-20191016.pdf (NAIC Testimony).

⁵⁹ Treasury's ACRSM, based upon an evaluation of prior and projected changes to risk sharing under the Program, also considered whether the Program has transferred too much risk away from the Federal backstop to the private market. *See* Report of the Advisory Committee on Risk-Sharing Mechanisms (May 2020), 10-13, https://home.treasury.gov/system/files/311/5-20-ACRSM-Report-Final.pdf (ACRSM Report). The work of the ACRSM is discussed in more detail in Section IX.

multi-peril (CMP) insurance. CMP insurance is a type of commercial package that contains coverage for more than one line of insurance in a single policy. Such insurance products are more commonly purchased by smaller or medium-sized business entities, ⁶⁰ and the TRIP data calls indicate they constitute a significant proportion (32 percent in 2019) of all policy premiums reported by non-small and small insurers in the TRIP-eligible lines of insurance, excluding workers' compensation.

CMP policies have a high take-up rate for terrorism coverage, which indicates that participating insurers are regularly "making available" terrorism risk insurance to their policyholders. In the 2018-2020 TRIP data calls, approximately 80 percent 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. Commenters have characterized insurance capacity in the terrorism risk insurance market as remaining "abundant."

Treasury assesses availability for workers' compensation insurance differently because the takeup rate for terrorism risk coverage in workers' compensation is 100 percent, due to the fact that all jurisdictions require that terrorism coverage be included in all workers' compensation policies. Accordingly, assessing "availability" in the workers' compensation market can be 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. As noted by industry sources, in situations where the residual market share is large or growing it may indicate market stress or inefficiency and may put commensurate pressure on

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⁶⁰ As noted by industry sources, 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.

⁶¹ 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 and 2019 TRIP data calls, and 92 percent in the 2020 TRIP data call. *See also* Section V.C.

⁶² See Testimony of Tarique Nageer, Marsh & McLennan Companies, before the Senate Banking, Housing, and Urban Affairs Committee (June 18, 2019), 6, https://www.banking.senate.gov/imo/media/doc/Nageer%20Testimony%206-18-19.pdf (Marsh Senate Testimony); Lloyd's Comments, 1 ("Terrorism insurance remains available and affordable due to TRIA's design. The 'make available' requirement ensures that cover is available to commercial policyholders, and while affordability may vary due to a variety of different factors, the best measure of its affordability is seen in the take-up rates, which remain strong across most regions of the country and across most lines of cover.").

insurers in the voluntary market that are required to assume a large or growing share of risk through involuntary policy writing.⁶³

Since the enactment of TRIA, available industry data indicates that the residual market share of total workers' compensation premiums has been stable, ranging from 4 to 6 percent of total workers' compensation premiums between 2007 and 2019.⁶⁴ Similarly, such industry data reflects that the percentage of policyholders self-insuring in the workers' compensation market has remained constant between 23.9 percent in 2007 and 24.6 percent in 2017.⁶⁵ Accordingly, in the specific context of workers' compensation insurance, terrorism risk insurance is generally available in the marketplace.

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 TRIP-eligible DEP) is comprised of embedded policies, while the remaining 20 percent are standalone terrorism policies. However, the market share of embedded policies increases when measured by policy limits of liability because standalone policies provide much lower levels of coverage as compared to embedded policies. Each type of policy is examined in greater detail below.

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.⁶⁶ This premium can be expressed to the policyholder as a percentage of the total premium charged for the policy.⁶⁷

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⁶³ 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.

⁶⁴ NCCI Comments, 3.

⁶⁵ See Elaine Weiss, Griffin Murphy, and Leslie I. Boden, Workers' Compensation: Benefits, Coverage, and Costs (2017 Data), National Academy of Social Insurance (October 2019), 21, https://www.nasi.org/sites/default/files/nasiRptWkrsComp201710_31%20final(1).pdf (2019 NASI Workers' Compensation Report).

⁶⁶ See General Disclosure Requirements, 31 C.F.R. § 50.10 (2018); Clear and Conspicuous Disclosures, 31 C.F.R. § 50.12 (2019).

⁶⁷ See Clear and Conspicuous Disclosure, 31 C.F.R § 50.12(b) (2019); see also Marsh Comments (2019 Terrorism Risk Insurance Report), 9 (reflecting analysis of terrorism risk insurance cost by industry segment based upon percentage that terrorism risk premium bears to policy premium as a whole).

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. 9

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for insured losses covered by the Program TRIA, § 103(b)(2). See also 31 C.F.R. § 50.12(b) (2019) (further defining permissible means of disclosure, which may not be "misleading in the context of the Program."). One commenter raised whether disclosures stated in terms of \$0 premium charged, or premium "included," or statements reflecting that there is "no separate premium charged for insured losses resulting from terrorism" are in compliance with the Program. See generally CBI Compliance Comments. A failure to comply with requirements could affect the ability of a participating insurer to submit claims for the federal share of compensation where the required Program disclosures associated with the policies under which such claims arise are insufficient. See Terrorism Risk Insurance Program Schedule B (Certification of Compliance with Section 103(b) of Terrorism Risk Insurance Act), https://home.treasury.gov/system/files/311/TRIP02B.pdf. Treasury will evaluate the sufficiency of disclosures to policyholders in connection with any claims for the federal share of compensation to verify that insurers have provided policyholders with appropriate information on the amount of premium they are paying for the terrorism risk insurance they have elected to purchase.

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.

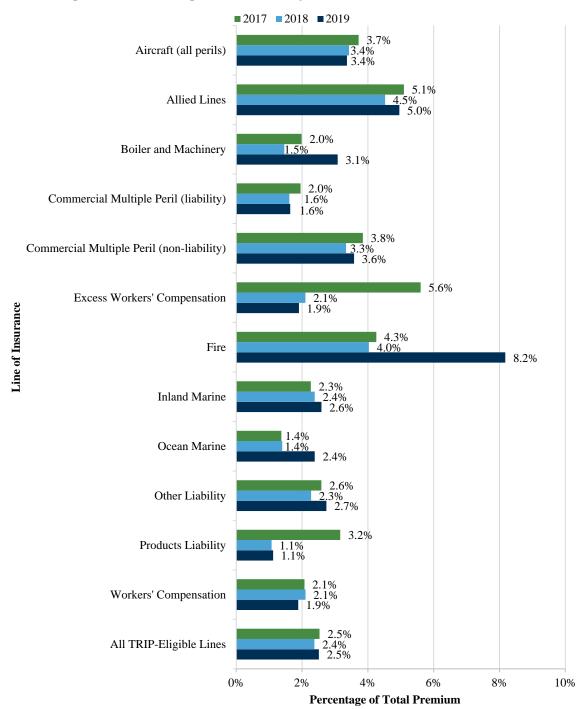
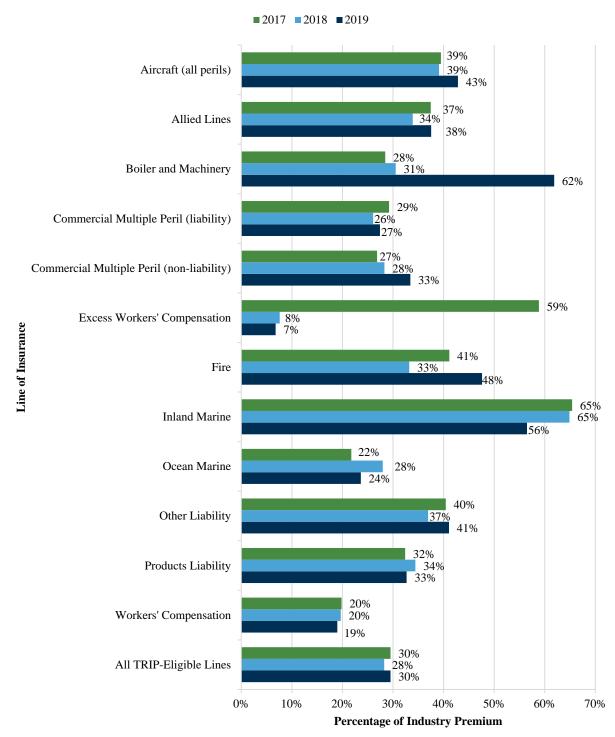


Figure 4: Percentage of Total Policy DEP Allocated to Terrorism Risk⁷⁰

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 premiums decline by only a few hundredths of a percentage point, rounding to 2.3 percent in 2018 and remaining at 2.5 percent in 2019.

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



Charges for terrorism risk coverage vary not only by line of insurance but also by geographic area. For purposes of analysis by geographic area, Treasury generally uses either the four U.S. Census Regions (shown in Figure 6) or individual state jurisdictions.

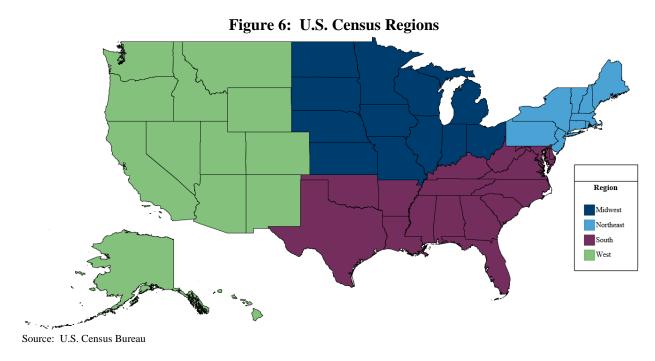


Figure 7 illustrates the percentage of total premiums charged for terrorism risk insurance by region.

■2017 **■**2018 **■**2019 4.0% 3.3% 3.4% Bercentage of Total Bremium 3.5% 3.0% 2.5% 1.5% 1.0% 0.5% 0.0% 3.1% 2.6% 2.4% 2.3% 2.3% 1.9% 2.1% 2.0% 1.9% 1.9% West South Midwest Northeast U.S. Census Region

Figure 7: Percentage of Total Policy DEP Allocated to Terrorism Risk (By Region)

Figure 8 illustrates the percentage of total direct earned premiums for terrorism risk insurance by state.

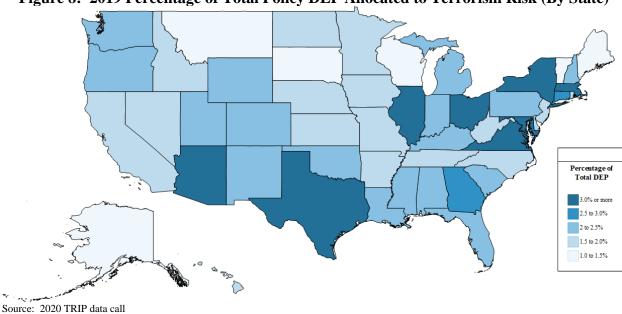


Figure 8: 2019 Percentage of Total Policy DEP Allocated to Terrorism Risk (By State)

Figure 9 illustrates where terrorism risk insurance was provided for no additional charge by region.

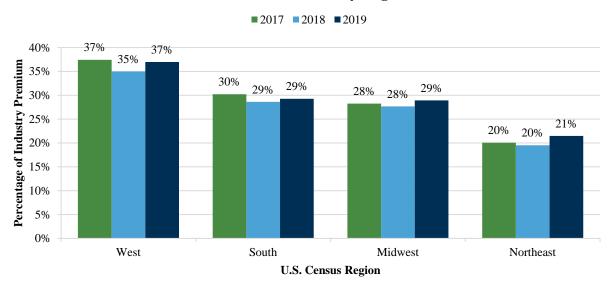


Figure 9: Percentage of DEP Where Policies Include Terrorism Coverage at No Additional Cost (By Region)

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

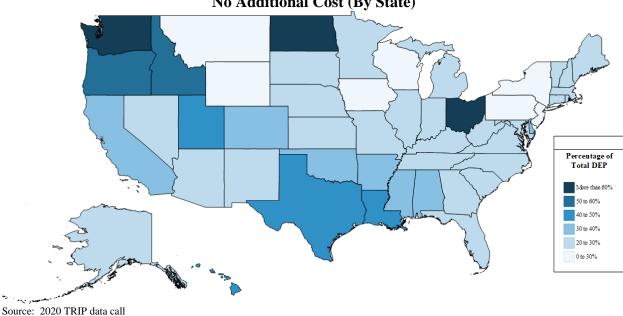


Figure 10: 2019 Percentage of DEP Where Policies Include Terrorism Coverage at No Additional Cost (By State)

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

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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.

■2017 **■**2018 **■**2019 Information 17.3% 0.6% Utilities 7.4% Mining, Quarrying, and Oil & Gas Extraction **Educational Services** Public Administration Accommodation & Food Services 9.4% Arts, Entertainment & Recreation Finance & Insurance Policyholder Industry Sector Other Services (except Public Administration) Agriculture, Forestry, Fishing & Hunting 6.9% Wholesale Trade Manufacturing Retail Trade Real Estate and Rental and Leasing Construction 2.3% Professional, Scientific & Technical Service 5.9% Management of Companies and Enterprises Administrative & Support & Waste Management &

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

Source: 2018-2020 TRIP data calls

Remediation Services

Transportation & Warehousing

Health Care & Social Assistance

0%

4.7%

10%

Percentage of Total Premium

15%

20%

5%

The data from the 2018-2020 TRIP data calls demonstrates that terrorism risk insurance provided on an embedded basis is priced at a relatively small percentage of the total premiums charged for policies, approximately 2.5 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 policies only provide coverage for losses arising from terrorism, unlike policies providing terrorism risk insurance on an embedded basis. As reported by industry sources, standalone coverage is purchased primarily by organizations that are viewed by insurers as being at relatively high risk of loss due to terrorism in 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. Any losses paid by insurers under non-certified standalone terrorism risk policies would not be eligible for reimbursement under TRIP.

As shown in Figure 12, DEP under non-certified standalone terrorism risk insurance policies accounted for a higher percentage, for most insurer categories, than total DEP earned under certified standalone policies. Only captive insurers reported earning a majority of their premiums for standalone terrorism risk insurance policies under certified policies.

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

	Cer	tified Polic	cies	Non-C	ertified Pol	licies
	2017	2018	2019	2017	2018	2019
Alien Surplus Lines Insurers	39.0%	58.7%	32.4%	61.0%	41.3%	67.6%
Captive Insurers	95.3%	92.9%	94.5%	4.7%	7.1%	5.5%
Non-Small Insurers	48.0%	30.1%	34.8%	52.0%	69.7%	65.2%
Small Insurers	77.4%	5.9%	0.5%	22.6%	94.1%	99.5%
All Insurer Categories	80.0%	74.4%	67.4%	20.0%	25.6%	32.6%

Source: 2018-2020 TRIP data calls

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

The data also suggests that standalone terrorism policies in each insurer category can 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 upon whether certified or non-certified coverage is provided.

Figure 13: 2019 Certified Standalone Versus Non-Certified Standalone Policies by Policy Count and DEP

	Certi	ified Standalone	Policies	Non-Ce	rtified Standalo	ne Policies
	# of		Average	# of		Average
	Policies	Total DEP	Policy Cost	Policies	Total DEP	Policy Cost
Alien Surplus Lines Insurers	1,985	\$ 117,313,069	\$ 59,100	5,616	\$ 244,479,930	\$ 43,533
Captive Insurers	285	540,581,869	1,896,778	9	31,450,879	3,494,542
Non-Small Insurers	2,116	30,414,345	14,374	3,879	56,925,356	14,675
Small Insurers	1	154	154	11	31,760	2,887

Source: 2020 TRIP data call

The TRIP data calls do 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. Treasury cannot determine, based upon the data, the extent to which the 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. For non-small insurers, the data for 2019 does not reflect any significant difference in the relative cost of the different types of standalone terrorism policies. Alien surplus lines insurers reported a lower total average cost for non-certified standalone policies than the cost charged for certified policies. Treasury will continue to monitor and assess these issues.

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 (20.5 percent in 2017, 19.9 percent in 2018, and 18.7 percent in 2019), with the balance of approximately 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 2017, 2018, and 2019. ⁷³

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⁷³ Commenters have also noted the small portion of total market occupied by standalone terrorism polices, and have opined that the market may only exist at all on account of the support otherwise provided by TRIP, and that such coverage could not replace the capacity otherwise backstopped by the Program. *See* Lloyd's Comments, 2; CIAT Comments, 2.

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**

	Embe	edded Terro	rism	Standalone Terrorism		
	2017	2018	2019	2017	2018	2019
Alien Surplus Lines Insurers	\$ 127	\$ 89	\$ 121	\$ 183	\$ 297	\$ 176
Captive Insurers	1,300	773	859	1,464	925	1,195
Non-Small Insurers	8	7	9	572	314	67
Small Insurers	13	10	22	339	44,653 ⁷⁴	4,825
All Insurer Categories	13	12	15	813	596	438

Source: 2018-2020 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 to policyholders viewed as presenting exposures subject to a higher risk of terrorism attack.

C. **Take-Up Rates for Terrorism Risk Insurance**

TRIA requires an offer—but does not mandate the purchase—of terrorism risk insurance.⁷⁵ 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 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.

Analyses by Treasury between 2005 and 2014 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 2006.⁷⁶ In its 2018 Effectiveness

⁷⁴ This figure is based upon reported information for only four policies.

⁷⁵The 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.

⁷⁶ 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), Terrorism Risk Insurance: Report of the President's Working Group on Financial Markets (2006), 42-44, https://home.treasury.gov/system/files/311/report.pdf; PWG, Market Conditions for Terrorism Risk Insurance 2010 (2010), 23, https://www.treasury.gov/resource-center/fin-

Report, Treasury found the take-up rates to be higher, ranging from 62 percent to 83 percent depending upon the year, and whether take up was measured by policy count, DEP, or insured values.⁷⁷

Figure 15 illustrates the take-up rates in 2018 by policy count, DEP, and property and liability policy limits. Information is based upon alien surplus lines, non-small, and small insurer reported data.⁷⁸

Figure 15: 2018 Terrorism Risk Insurance Take-Up Rates by Policy Count, DEP, and Policy Limits (by Insurer Category)

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	Policy Count	DEP	Property Limits	Liability Limits
Alien Surplus Lines Insurers	15%	43%	24%	69%
Non-Small Insurers	79%	65%	77%	69%
Small Insurers ⁷⁹	N/A	55%	60%	60%
All Insurer Categories	78%	63%	75%	68%

Source: 2019 TRIP data call

Figure 16 illustrates the take-up rates in 2019 by the same measures.

Figure 16: 2019 Terrorism Risk Insurance Take-Up Rates by Policy Count, DEP, and Policy Limits (by Insurer Category)

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	Policy Count	DEP	Property Limits	Liability Limits
Alien Surplus Lines Insurers	19%	41%	45%	64%
Non-Small Insurers	81%	62%	81%	62%
Small Insurers ⁸⁰	N/A	60%	25%	62%
All Insurer Categories	79%	60%	76%	62%

Source: 2020 TRIP data call

The results shown in Figures 15 and 16 are generally consistent with similar figures cited by stakeholders. 81

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.

addressed in Section VI.B.

⁷⁸ 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 the decision to self-insure through a captive insurer). The captive insurance market for terrorism risk insurance is

⁷⁷ FIO, 2018 Effectiveness Report, 29-30.

⁷⁹ Treasury did not require small insurers to provide policy count information in the 2019 TRIP data call.

⁸⁰ Treasury did not require small insurers to provide policy count information in the 2020 TRIP data call.

⁸¹ See Marsh Comments (2019 Terrorism Risk Insurance Report), 8 (reflecting 2017 and 2018 take-up rate of 62 percent in each year).

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. In its 2018 Effectiveness Report, Treasury found that take-up rates varied by region in 2016 and 2017, with higher rates observed in the Northeast than in other regions, although even this was not uniform across all methods of measurement. Figure 17 shows the 2018 take-up rates indicated for the Northeast, Midwest, South, and West regions, using the same benchmarks of policy count, DEP, and insured value.

Figure 17: 2018 Terrorism Risk Insurance Take-Up Rates by Policy Count, DEP, and Insured Value (by Region)

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	Policy Count	DEP	Property Limits	Liability Limits		
Northeast	76%	68%	75%	70%		
Midwest	81%	66%	84%	73%		
South	76%	61%	74%	72%		
West	81%	61%	70%	58%		
All Regions	78%	63%	75%	68%		

Source: 2019 TRIP data call

Figure 18 shows the 2019 take-up rates using the same metrics.

Figure 18: 2019 Terrorism Risk Insurance Take-Up Rates by Policy Count, DEP, and Insured Value (by Region)

	Policy Count	DEP	Property Limits	Liability Limits	
Northeast	73%	65%	80%	66%	
Midwest	81%	64%	82%	64%	
South	77%	58%	73%	64%	
West	82%	58%	74%	59%	
All Regions	79%	61%	76%	63%	

Source: 2020 TRIP data call

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⁸² FIO, 2018 Effectiveness Report, 30-31.

Figure 19 illustrates take-up rates, based upon DEP, by region.⁸³

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

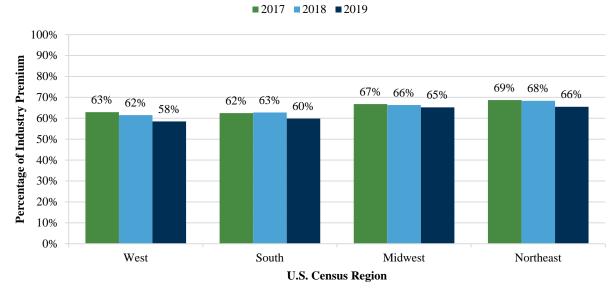
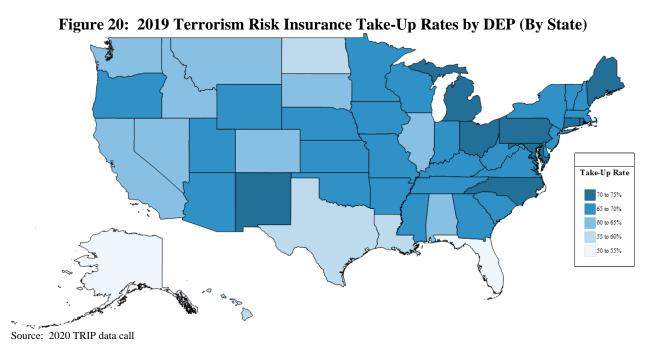


Figure 20 illustrates take-up rates, based upon DEP, by state (for 2019 only).



⁸³ Similar to the other analyses by region, the information illustrated is based upon non-small and small insurer reporting only.

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The Appendices provide further detail on how take-up may vary by state, type of insurance, and small versus non-small insurers. Appendix 1 contains a table setting forth the 2019 take-up rates presented in Figure 20 by state for both small and non-small insurers combined, as well as additional detail on small and non-small insurers. Appendix 2 provides more detailed take-up information for small and non-small insurers, by state and by groups of TRIP-eligible lines of insurance.

Take-up rates also vary by individual line of insurance.⁸⁴ Figure 21 shows the take-up rate within each TRIP-eligible line of insurance (excluding workers' compensation), by DEP.

■2017 **■**2018 **■**2019 Aircraft (all perils) 56% 52% 58% Allied Lines 56% 85% Boiler and Machinery 83% 82% 81% Commercial Multiple Peril (liability) 79% 80% 80% Commercial Multiple Peril (non-liability) 80% 81% Line of Insurance 79% Excess Workers' Compensation 81% 80% 67% Fire 64% 60% 61% Inland Marine 60% 46% 46% Ocean Marine 49% 46% 59% Other Liability 57% 55% **Products Liability** 49% 66% All TRIP-Eligible Lines 65% 63% 0% 30% 40% 50% 70% 80% 90% 100% 10% 20% 60%

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

Source: 2018-2020 TRIP data calls

Percentage of Industry Premium

⁸⁴ Treasury has previously addressed some of the issues that could affect take up by line of insurance. *See* FIO, 2018 Effectiveness Report, 32, n.84.

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)

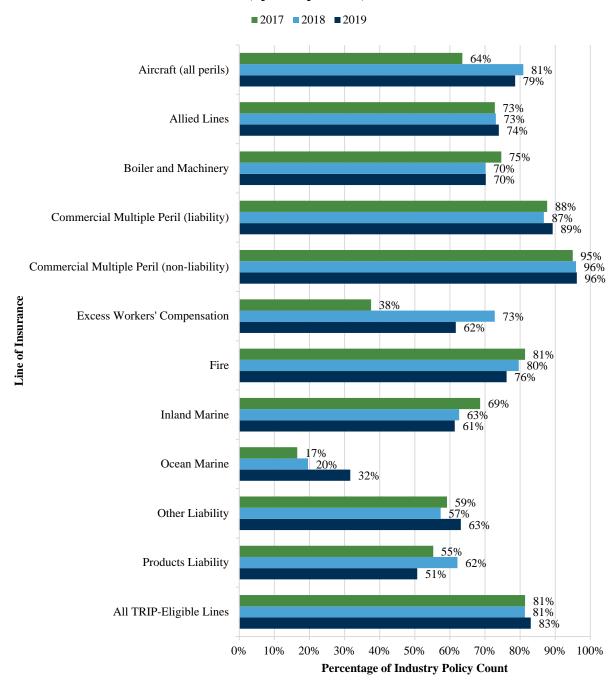


Figure 23 shows the take-up rate in TRIP-eligible property lines by property policy limits.

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

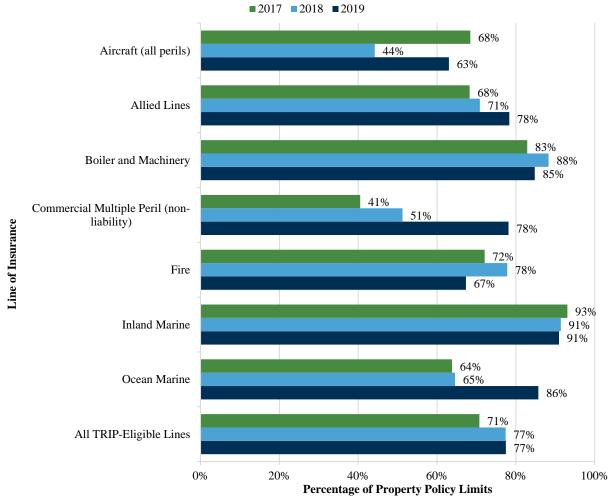
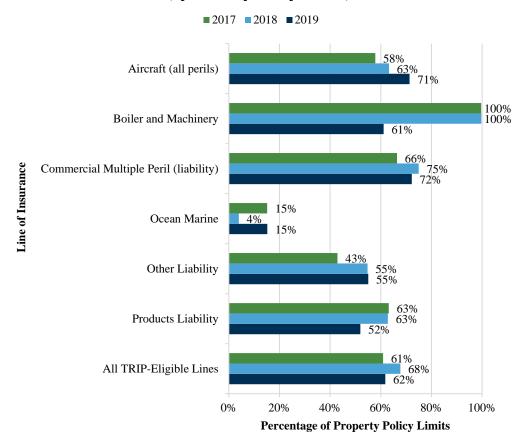


Figure 24 shows the take-up rate in TRIP-eligible lines by liability policy limits.

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



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

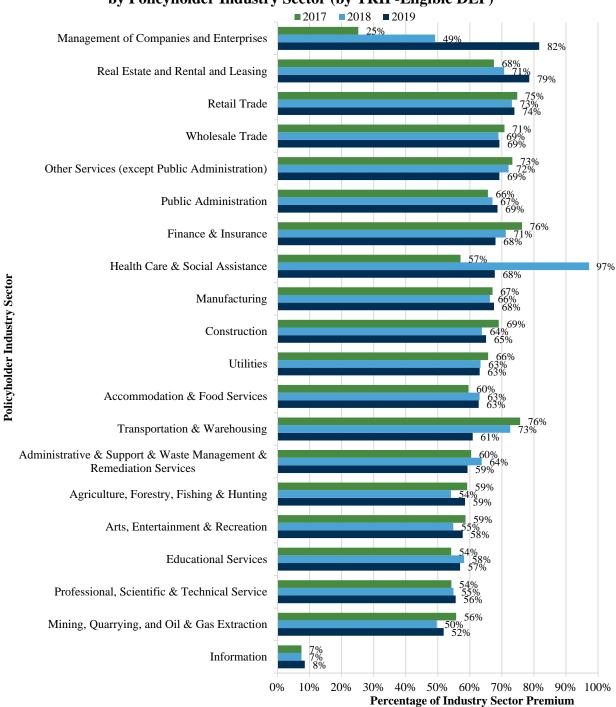


Figure 25: Terrorism Risk Insurance Take-Up Rates by Policyholder Industry Sector (by TRIP-Eligible DEP) 85

⁸⁵ Data provided for non-small and alien surplus lines insurers. Small insurers have not been required to report policyholder industry sector information in the TRIP data calls. Take-up rates for captive insurers were not

Treasury also requested more specific data from non-small, alien surplus lines, and captive insurers concerning risk exposures in 26 specific metropolitan areas. ⁸⁶ This information addressed, among other things, the policy property limits assumed by each reporting insurer that are subject to the Program (as well as by those not subject to the Program because terrorism risk insurance was not obtained). In the 2018-2020 TRIP data calls, 85 percent or more of the reported policy exposures were identified with a particular geographic region—either a specific metropolitan area, or in the balance of the United States not associated with the specified metropolitan areas. ⁸⁷ Furthermore, the results obtained for each specified metropolitan area show that the aggregate reported policy property limits are generally proportional to gross domestic product in most metropolitan areas, thus generally validating the data reported by insurers. ⁸⁸ Figure 26 illustrates the combined results obtained from the 2018-2020 TRIP data calls ⁸⁹

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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.

⁸⁶ The metropolitan areas identified are identical to those utilized by A.M. Best when considering the terrorism risk exposures of the companies it evaluates.

⁸⁷ Reporting insurers were also permitted to identify premiums by geographic region in an "Unknown" category, indicating that the policy exposure could not be retrieved by geographic location, whether by one of the specified metropolitan areas or in the balance of the United States. Approximately 14 percent of the total property exposure was reported in the Unknown category in the 2018 TRIP data call. That figure decreased to 13 percent in the 2019 TRIP data call, and further decreased to 2 percent in the 2020 TRIP data call.

⁸⁸ 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.

⁸⁹ Commenters report similar take-up figures for the larger metropolitan areas. *See* Marsh Comments (2019 Terrorism Risk Insurance Report), 11 (reporting 2018 take-up rate figures for New York, Chicago, Atlanta, San Francisco, Los Angeles, and Houston).

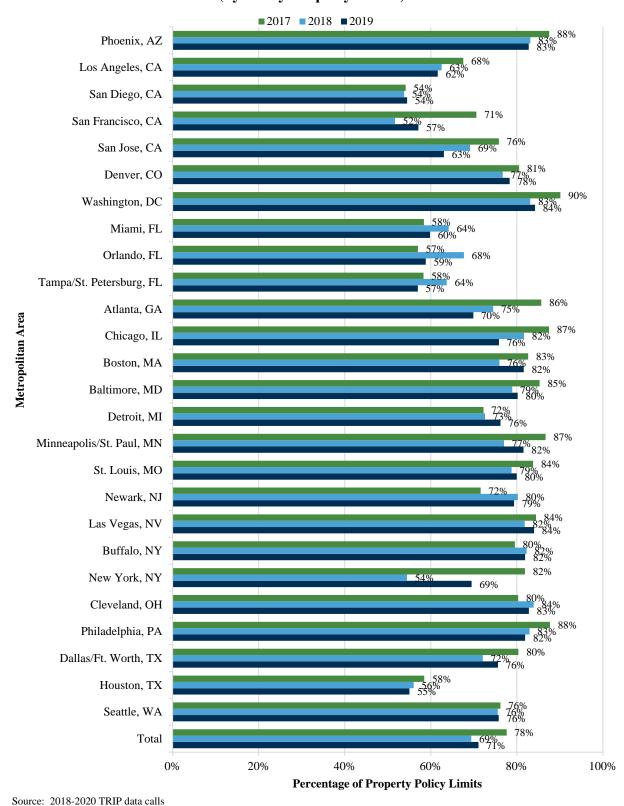


Figure 26: Terrorism Risk Insurance Take-Up Rates by Metropolitan Area (by Policy Property Limits)

Take-up rates by property exposure for areas outside a defined metropolitan area were reported to be 76.8 percent in 2017, 70.2 percent in 2018, and 66.6 percent in 2019—figures comparable to the indicated figures for all metropolitan areas combined (74.8 percent in 2017, 69.4 percent in 2018, and 71.1 percent in 2019). 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 insured property exposures under the Program fell within the "all other locations in the United States" category in 2017 versus 31.4 percent in the identified metropolitan areas. In 2018, the reported figures were 68.1 percent and 31.9 percent, respectively, and in 2019 they were 67.1 percent and 32.9 percent, respectively.

D. Availability and Affordability of Terrorism Risk Insurance for Places of Worship

The 2019 Reauthorization Act modified TRIA to require that, in reports concerning the effectiveness of the Program, the Secretary provide "an evaluation of the availability and affordability of terrorism risk insurance, which shall including an analysis of such availability and affordability of terrorism risk insurance specifically for places of worship." Although Treasury has previously analyzed the availability and affordability of terrorism risk insurance generally as a measure of the effectiveness of the Program, Treasury has not previously collected information specific to places of worship in its annual data calls.

In order to obtain the necessary information, Treasury introduced a new reporting worksheet, developed in consultation with industry stakeholders, to collect data specific to places of worship in the 2020 TRIP data call. Treasury will provide notice and seek comments for use of the "Places of Worship worksheet" in the 2021 TRIP data call.⁹¹

The Places of Worship worksheet seeks premium information, allocated by whether the policyholder obtained terrorism risk insurance in the general categories of property, liability, and workers' compensation insurance. The codes specified for reporting are limited to religious organizations, 92 which are intended to best approximate the premises associated with places of worship. The information collected can be analyzed to assess the take-up and cost of terrorism risk insurance by places of worship, which is how Treasury typically evaluates whether such insurance is available and affordable in the marketplace.

Figure 27 shows the take-up of terrorism risk insurance by places of worship, by premium, by insurer category and type of coverage.

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^{90 2019} Reauthorization Act, § 502(c); TRIA, §104(h)(2)(B).

⁹¹ See generally 2020 Terrorism Risk Insurance Program Data Call, 85 Fed. Reg. 15036 (March 21, 2020).

⁹² The Places of Worship worksheet permits reporting by the specified North American Industrial Coding System (NAICS) code, Standard Industrial Classifications (SIC) code, or Insurance Services Office (ISO) Class Codes, as well as by other methodologies that are calculated to isolate the premium of reporting insurers associated with places of worship. The worksheet instructions state that premium associated with religious-affiliated institutions (such as hospitals or schools) that are not principally places of worship should not be reported. All insurers subject to the data call were required to complete the Places of Worship worksheet.

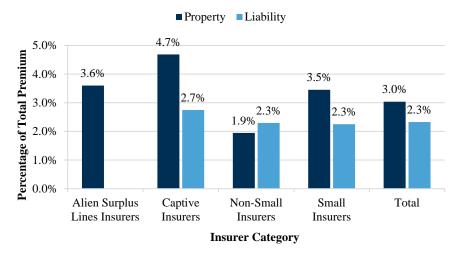
■ Property ■ Liability 94% 97% 100% 86% 85% Percentage of Category Premium 83% 83% 81% 78% 80% 68% 60% 40% 20% 1% 0% Alien Surplus Captive Non-Small Small Total Lines Insurers Insurers Insurers Insurers **Insurer Category**

Figure 27: Terrorism Risk Insurance Take-Up Rates by Places of Worship (by Premium) (by Insurer Category and Type of Coverage)

Source: 2020 TRIP data call

Figure 28 shows the percentage charge, by premium, for places of worship, by insurer category and type of coverage. 93

Figure 28: Percentage of Total Policy DEP Allocated to Terrorism Risk for Places of Worship (by Insurer Category and Type of Coverage)⁹⁴



Source: 2020 TRIP data call

Based upon the initial year of data collection, places of worship obtain terrorism risk insurance at rates that exceed those of policyholders overall (approximately 83 percent versus 62 percent, as

⁹³ Treasury did not collect information concerning when a \$0 premium for terrorism risk insurance was identified for places of worship. Therefore, this cost analysis is based upon the total amount of terrorism risk premium charged against TRIP-eligible lines premium where terrorism risk insurance was provided.

⁹⁴ No cost information is provided for alien surplus lines insurers in the liability lines, as insufficient data was reported by such insurers where coverage was provided (as reflected by the low take-up rate information reported by such insurers in Figure 28).

measured by premium). The cost paid by places of worship is higher than the amount paid by policyholders overall (2.7 percent of total TRIP-eligible lines premiums for places of worship compared to 2.3 percent of total premiums for policyholders overall). The higher cost for terrorism risk insurance for places of worship could possibly be explained by the higher take-up rate for the insurance. Also of note is the significant role played by small insurers, which represent (by premium) 45 percent of this market segment, even though they only represent approximately 11 percent of the entire market in the TRIP-eligible lines of insurance. Treasury will continue to evaluate the availability and affordability of terrorism risk insurance for places of worship in future reports.

E. Private Reinsurance Availability

Reinsurance mechanisms support the proper functioning of insurance markets. Treasury observed in its 2018 Effectiveness Report that 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 to place business." That capacity was and continues to be augmented by significant competition from alternative risk mechanisms such as insurance-linked securities. More recent information from industry sources indicates that there have been more significant variations in reinsurance pricing and capacity depending on geography and line of business, as well as upon the loss record of the particular ceding insurer and existing client relationships. As an industry, stakeholders report that the global reinsurance market has continued to grow, recording 15 percent annual growth in capital in 2019.

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 Program exposure. Treasury has evaluated in prior reports reinsurance capacity for terrorism risk since the enactment of TRIA. In earlier analyses, Treasury found that such capacity was limited and had remained relatively static since shortly after the September 11 attacks. In connection with its 2016 and 2017 TRIP data calls, however, Treasury noted that reinsurance

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⁹⁵ For information on reinsurance markets generally, see FIO, *The Breadth and Scope of the Global Reinsurance Market and the Critical Role Such Market Plays in Supporting Insurance in the United States* (2015), https://home.treasury.gov/system/files/311/FIO%20-Reinsurance%20Report.pdf.

⁹⁶ See FIO, 2018 Effectiveness Report, 40-41.

⁹⁷ L.S. Howard, "January 2020 Reinsurance Renewals Varied Significantly, Brokers Say," *Insurance Journal* (January 6, 2020), https://www.insurancejournal.com/news/international/2020/01/06/553595.htm.

⁹⁸ Willis Re, *Reinsurance Market Report: Results for Full-Year 2019* (April 2020), https://www.willistowerswatson.com/-/media/WTW/Insights/2020/04/willis-re-reinsurance-market-report-april-2020-results-for-year-end-2019.pdf. Similar to the other data analyzed by Treasury in this Report, the information analyzed by Treasury does not reflect potential impacts on the reinsurance sector from COVID-19 (see note 5 of this Report).

⁹⁹ 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).

capacity for terrorism risk had increased, ¹⁰⁰ 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 Treasury's earlier analyses. ¹⁰¹ That expanded capacity was not, based upon Treasury's review, augmented by significant investor interest in insurance-linked securities with terrorism risk exposure. ¹⁰²

Commenters report that 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. While this development means that a growing amount of terrorism risk reinsurance is available to potentially satisfy losses, such reinsurance limits are subject to erosion or exhaustion on account of non-terrorism related claims, such as hurricane losses, potentially making them unavailable to back terrorism losses in some instances.

The data reported to Treasury since the 2018 Effectiveness Report continues to support 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 trail the amount of reinsurance purchased for natural catastrophe risks (except in the case of captive insurers, which purchased more terrorism risk reinsurance than natural catastrophe reinsurance). 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

co-pay obligations of the captive insurers. FIO, 2018 Effectiveness Report, 18.

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¹⁰⁰ Treasury's 2018 Effectiveness Report, based upon industry data collected by Treasury for 2016 and 2017, noted that responding insurers (excluding captive insurers) reported a total of \$61.8 billion and \$60.6 billion, respectively, in reinsurance coverage for a single loss resulting from terrorism. Based upon other reported information, approximately 78 percent in 2016 and 77 percent in 2017 of these amounts 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. Captive insurers separately obtained an additional \$38.1 billion and \$31.6 billion in 2016 and 2017, respectively, in per loss terrorism reinsurance limits, and an even higher percentage of those figures fell within the

¹⁰¹ 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," and noting that in 2017 "the combined property and workers' compensation private conventional-only terrorism reinsurance capacity was estimated to be \$2.5 billion per cedent program."). See also Lloyd's Comments, 3 ("The global reinsurance market has seen expanded capacity for terrorism risk since TRIA's original enactment, and perhaps the largest single contributing factor is the benign loss environment in the United States—i.e., no certified acts of terrorism since TRIA's enactment, no major terrorism loss events in recent years.").

However, in February 2019, Pool Reinsurance Co. Ltd. (Pool Re), the government-backed mutual terrorism reinsurance facility in the United Kingdom, brought the first-ever terrorism risk catastrophe bond to market as part of its general retrocessional program for its terrorism risk exposures. *See* "Pool Re Sponsors First Terrorism Risk Catastrophe Bond, Baltic PCC," *Artemis*, January 14, 2019, https://www.artemis.bm/news/pool-re-sponsors-first-terrorism-risk-catastrophe-bond-baltic-pcc/.

¹⁰³ See RAA Comments, 3 ("The inclusion of terrorism reinsurance coverage in many natural hazard property and workers' compensation catastrophe covers has resulted in traditional and alternative markets supporting existing relationships and diversification efforts.").

catastrophe risk. Figure 29 identifies the total amounts of per loss terrorism risk reinsurance purchased by responding insurers that will cover losses subject to the Program. ¹⁰⁴

■2018 ■2019 \$50 \$47.1 Reinsurance Covering TRIP Loss (\$ billions) \$44.2 \$45 Limits of Any One Loss of Purchased \$40 \$35 \$28.9 \$30 \$26.6 \$25 \$20 \$15.8 \$15.8 \$12.6 \$15 \$11.8 \$10 \$5 \$0 Alien Surplus Lines Captive Insurers Non-Small Insurers Small Insurers Insurers **Insurer Category**

Figure 29: Total Per Loss Reinsurance Limits Purchased for Losses Subject to TRIP

Source: 2019 and 2020 TRIP data calls

Figure 30 reflects the total amounts of per loss natural catastrophe reinsurance purchased by responding insurers during the same periods. It reflects larger total amounts of natural catastrophe reinsurance versus terrorism risk reinsurance purchased on a per loss basis for alien surplus lines, non-small, and small insurers, and lower amounts for captive ceding insurers.¹⁰⁵

¹⁰⁴ 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 groups state that reinsurance capacity for conventional terrorism losses is approximately \$2.5 billion per cedent program. *See* FIO, *2018 Effectiveness Report*, note 97; RAA Comments, 3. This figure remains generally consistent with the information reported to Treasury, although a small number of insurers in both the 2019 and 2020 TRIP data calls reported total per loss limits for conventional terrorism risk in excess of this estimate.

¹⁰⁵ 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.

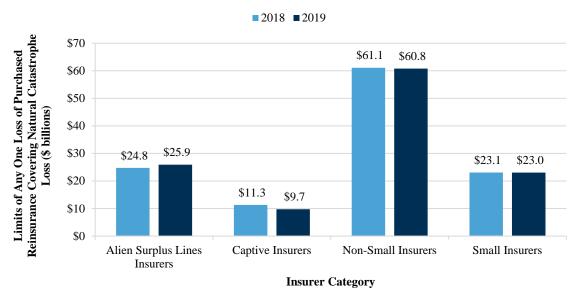


Figure 30: Total Per Loss Reinsurance Limits Purchased for Natural Catastrophes

Source: 2019 and 2020 TRIP data calls

Private reinsurance can cover some or all of the exposure of participating insurers for amounts which the federal government will not reimburse under TRIP, namely amounts within: (1) insurers' Program deductibles and (2) insurers' co-pay share above the Program deductible. Figure 31 shows Treasury's calculation of 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.

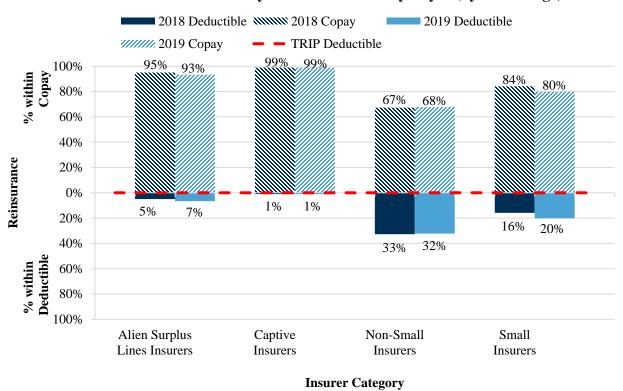


Figure 31: Total Per Loss Reinsurance Limits Purchased for TRIP Losses Within TRIP Deductible Layer and TRIP Co-Pay Layer (by Percentage)

Source: 2019 and 2020 TRIP data calls

Each column in Figure 31 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 2018 data, 82.2 percent of the purchased private reinsurance attaches above the participating insurer's TRIP deductible. The result is the same for 2019 (82.1 percent attaches above the deductible). These figures are materially affected by the activities of captive insurers, which purchase large amounts of reinsurance but have very small TRIP deductibles. When captive insurers are excluded from the analysis, the amount of reinsurance responding above the TRIP deductible was 75.9 percent of the total in 2018 and 75.5 percent in 2019.

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 information from industry sources and the

U.S. Government Accountability Office (GAO) regarding the reported risk appetite of reinsurers for terrorism risk. 106

Treasury also requests data regarding the reinsurance coverage that is expressly available for terrorism risks involving NBCR exposures. The data collected by Treasury for 2016 and 2017, which was analyzed in the 2018 Effectiveness Report, reflected significantly smaller amounts of reinsurance coverage for NBCR-related terrorism risk than the limits generally available for a terrorism loss. ¹⁰⁷ The more recent experience reported to Treasury since the last Effectiveness Report is similar.

■2018 ■2019 \$9.0 \$8.1 \$8.0 \$6.8 Reinsurance (\$ billions) \$7.0 \$6.0 \$5.9 \$6.0 \$5.0 \$4.0 \$3.5 \$3.1 \$3.0 \$2.0 \$1.0 \$-WC Exposures Property Loss Liability Loss **Type of Insurance**

Figure 32: Total Per Loss Reinsurance Limits Purchased for NBCR Losses Subject to TRIP (by Type of Insurance)

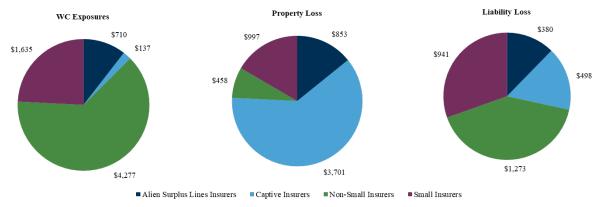
Source: 2019 and 2020 TRIP data calls

The reported reinsurance purchases for NBCR exposures are allocated among the various insurer categories as shown in Figures 33 (for 2018) and Figure 34 (for 2019).

¹⁰⁶ See Marsh Comments (2019 Terrorism Risk Insurance Report), 5 (noting the market assumption that "there is a finite amount of [reinsurance] capacity in the private market, especially for NBCR events."). GAO has also found that reinsurers frequently write terrorism risk reinsurance with specific limits for particular properties, as distinguished from a share of all properties insured by the ceding insurer. See GAO, 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.

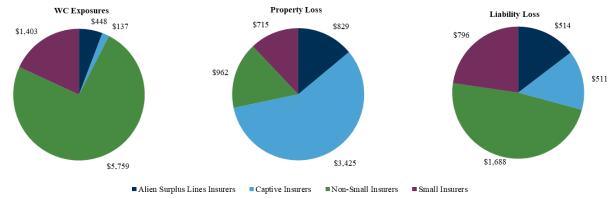
¹⁰⁷ FIO, 2018 Effectiveness Report, 45-47.

Figure 33: 2018 Total Per Loss Reinsurance Limits Purchased for NBCR TRIP Losses (by Type of Insurance), Allocated by Insurer Category (\$ millions)



Source: 2019 TRIP data call

Figure 34: 2019 Total Per Loss Reinsurance Limits Purchased for NBCR TRIP Losses (by Type of Insurance), Allocated by Insurer Category (\$ millions)



Source: 2020 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. Because many insurers generally exclude NBCR risks under P&C policies (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 losses arising from conventional acts of terrorism. Furthermore, a large portion of the limited reinsurance obtained for NBCR exposures supports the risks assumed

¹⁰⁸ See No Material Difference from Other Coverage, 31 C.F.R. § 50.22(b) (2019).

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. ¹⁰⁹

In sum, private reinsurance capacity for terrorism risk has improved significantly since the immediate aftermath of the September 11 attacks. 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. Nevertheless, commenters have noted that the aggregation risk reinsurance capacity, as does the difficulty of modeling potential terrorism exposure from both a frequency and severity standpoint. Commenters generally stated that there is sufficient private reinsurance capacity to support the risk exposures of participating insurers under the Program. However, commenters did not believe that there was sufficient private reinsurance capacity to replace the support provided by the Program in connection with a catastrophic terrorism loss. The TRIP data reflects that private reinsurance capacity may be reduced as the aggregation risk presented by a particular type of terrorism loss (such as from an NBCR attack) increases.

F. 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 has posed modeled loss questions in each TRIP data call from 2017 through 2020. 115

¹⁰⁹ See Section VI.B, addressing captive insurers.

¹¹⁰ See, e.g., Testimony of Joe Clark, United Educators, on behalf of the American Property Casualty Insurers Association, before the House Financial Services Committee, Subcommittee on Housing, Community Development, and Insurance (October 16, 2019), 3, https://financialservices.house.gov/uploadedfiles/hhrg-116-ba04-wstate-carterj-20191016.pdf (APCIA Testimony) (noting likely restriction in available reinsurance limits in the absence of TRIP); Marsh Comments (2019 Terrorism Risk Insurance Report), 5 ("[A] federal backstop remains essential if the private reinsurance market is to continue to provide capacity to higher-risk areas.").

¹¹¹ Aggregation risk refers to circumstances where the same event causes losses to a large number of policyholders of the same insurer, potentially in multiple lines of insurance.

¹¹² RAA Comments, 3 ("Although progress has been made in modeling terrorism loss scenarios, forecasts of the frequency and severity of terrorism losses remain problematic.").

¹¹³ RAA Comments, 3 ("Favorable loss experience and surplus growth may moderately increase the supply of private terrorism reinsurance but not to the extent that it would meet the needs of the primary industry to fully meet their retentions under TRIP."); Lloyd's Comments, 3 ("[T]he structure of the TRIP program effectively puts the private insurance market front and center in protecting against terrorism exposure. While private reinsurance capacity for terrorism risk has grown over the years, there is no 'crowding out' of the private market by the backstop because reinsurance capacity remains well below the private market retentions under TRIA.").

¹¹⁴ See also Lloyd's Comments, 3 ("NBCR cover remains challenging for insurers to write due to a number of factors, particularly the difficulty to model the potentially catastrophic losses associated with such events. While coverage can be found in certain circumstances and in limited amounts, prudent underwriting restricts Lloyd's syndicates in their net NBCR exposure, and thus limits its availability more broadly.").

¹¹⁵ Treasury has not required small insurers to complete the modeled loss questions in the 2017-2020 TRIP data calls. Given the size of the market represented by small insurers, and where their risks tend to concentrate, the

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. The 2017 TRIP data call used an event in New York City while the 2018 TRIP data call used an event in Chicago. 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. Treasury asked responding insurers to project the total amount of loss exposure arising from the hypothetical modeled event under their TRIP-eligible policies in force at the time of each such event. Treasury further requested that insurers then divide that amount among (1) the insurer's net payments within its 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. The reported information indicated 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, and that in each case those amounts would be largely or entirely subject to mandatory recoupment. 116

In the 2019 and 2020 TRIP data calls, respectively, Treasury posed an event that involved an NBCR component (for San Francisco) and an event at a shopping mall (for Dallas). As in the prior TRIP data calls, the modeled loss questions generate data from the scenarios that can be used to assess the cost of specified events to taxpayers, and the likely reimbursement of any such amount through the recoupment process. Such analysis also permits an evaluation as to how much loss falls to the various components of the Program (losses to Program participants, private reinsurers, and the Program), and how the loss is sustained by the different insurer categories (non-small, alien surplus lines, and captive insurers). Finally, the data also allows an assessment of how each of the insurer categories have (or have not) been able to access private reinsurance that responds to a terrorism loss. This can be compared to the nominal amounts of reinsurance limits otherwise being purchased by these sectors.

Figures 35(a) and (b) illustrate how the 2019 TRIP data call modeled loss question was projected to result in payments.

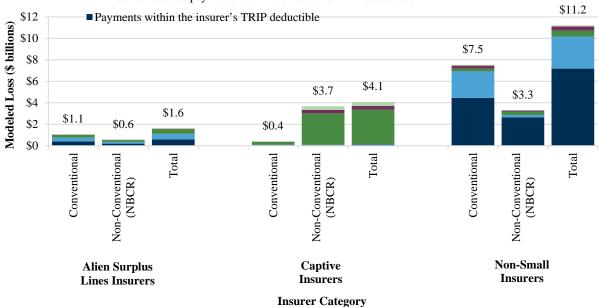
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experience of small insurers may not significantly affect the aggregate results, even though certain small insurers might sustain a significant loss.

¹¹⁶ FIO, 2018 Effectiveness Report, 48-52. No questions were posed about potential exposure under liability policies in the 2017 and 2018 modeled loss questions 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, https://www.iii.org/sites/default/files/docs/pdf/terrorism_white_paper_0320141_0.pdf (loss distribution estimates for losses arising from September 11 attacks reflecting that liability claims resulted in 12 percent of total losses). Treasury did ask responding insurers to report estimates associated with potential liability exposure in the 2020 TRIP data call's Dallas scenario.

Figure 35(a): Total Insured Loss Payments Resulting from San Francisco Modeled Loss Scenario by Insurer Category (\$ billions)

- Private reinsurance payments within the co-pay layer above the insurer's TRIP deductible
- Payments by the insurer in the co-pay layer above the TRIP deductible
- Federal share payment under TRIP
- Private reinsurance payments within the insurer's TRIP deductible



Source: 2019 TRIP data call

Figure 35(b): Total Insured Loss Payments Resulting from San Francisco Modeled Loss Scenario by Insurer Category (in \$ millions)

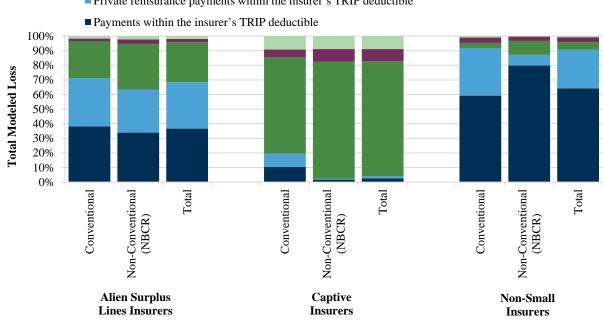
	Alien Surplus Lines Insurers		Captive Insurers		Non-Small Insurers	
	Conventional	Non- Conventional	Conventional	Non- Conventional	Conventional	Non- Conventional
Payments within the insurer's TRIP deductible	\$ 402.3	\$ 190.7	\$ 42.4	\$ 62.2	\$ 4,465.6	\$ 2,627.7
Private reinsurance payments within the insurer's TRIP deductible	348.7	166.1	37.6	20.9	2,459	242.0
Federal share payment under TRIP	266.6	175.7	270.5	2,938	260.3	313.0
Payments by the insurer in the co-pay layer above the TRIP deductible	20.3	17.1	21.6	319.4	276.2	98.2
Private reinsurance payments within the co-pay layer above the insurer's TRIP deductible	18.0	12.6	37.8	324.5	74.9	10.1
Total	\$ 1,055.8	\$ 562.2	\$ 409.9	\$ 3,664.9	\$ 7,535.6	\$ 3,290.9

Source: 2019 TRIP data call

Figure 36 sets forth how the loss amounts generated under the 2019 modeled loss scenario are distributed (on a 100 percent basis) within each insurer category.

Figure 36: Distribution of Loss Payments Arising from San Francisco Modeled Loss Scenario Within Each Insurer Category

- Private reinsurance payments within the co-pay layer above the insurer's TRIP deductible
- Payments by the insurer in the co-pay layer above the TRIP deductible
- Federal share payment under TRIP
- Private reinsurance payments within the insurer's TRIP deductible



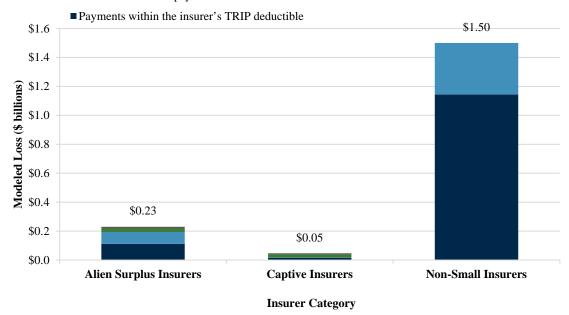
Insurer Category

Source: 2019 TRIP data call

Figure 37(a) and (b) illustrate how the 2020 TRIP data call's modeled loss scenario (set in Dallas in 2019) is projected to result in payments.

Figure 37(a): Total Insured Loss Payments Resulting from Dallas Modeled Loss Scenario by Insurer Category (\$ billions)

- Private reinsurance payments within the co-pay layer above the insurer's TRIP deductible
- Payments by the insurer in the co-pay layer above the TRIP deductible
- Federal share payment under TRIP
- Private reinsurance payments within the insurer's TRIP deductible



Source: 2020 TRIP data call

Figure 37(b): Total Insured Loss Payments Resulting from Dallas Modeled Loss Scenario by Insurer Category (\$ millions)

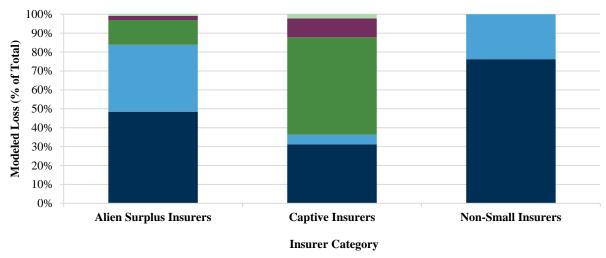
	Alien Surplus Lines	Captives	Non-Small Insurers
Payments within the insurer's TRIP deductible	\$ 112.1	\$ 14.6	\$ 1,143.6
Private reinsurance payments within the insurer's TRIP deductible	81.9	2.4	356.6
Federal share payment under TRIP	30.2	24.2	-
Payments by the insurer in the co-pay layer above the TRIP deductible	5.0	4.6	-
Private reinsurance payments within the co-pay layer above the insurer's TRIP deductible	2.1	1.1	-
Total	\$ 231.3	\$ 46.9	\$ 1,500.2

Source: 2020 TRIP data call

Figure 38 sets forth how the loss amounts generated under the 2020 TRIP data call's modeled loss scenario are allocated on a 100 percent basis within each insurer category.

Figure 38: Distribution of Loss Payments Arising from Dallas Modeled Loss Scenario within Each Insurer Category

- Private reinsurance payments within the co-pay layer above the insurer's TRIP deductible
- Payments by the insurer in the co-pay layer above the TRIP deductible
- Federal share payment under TRIP
- Private reinsurance payments within the insurer's TRIP deductible
- Payments within the insurer's TRIP deductible



Source: 2020 TRIP data call

The reported information indicates that both the San Francisco and Dallas scenarios would result in losses requiring payments by Treasury, although in each of these cases (as was largely the case with prior scenarios posed) the amounts expended by Treasury will be subject to complete recovery through the recoupment process. This recoupment will be at the 140 percent recoupment level through surcharges imposed by Treasury upon all commercial policyholders. Additional amounts would likely be subject to recoupment once losses associated with small insurers (not captured in these analyses) are considered.

The San Francisco NBCR scenario also provides information regarding captive insurers' terrorism risk exposures. This scenario shows that captive insurers account for the largest amount of claims against the Program. The claims of captive insurers in the prior scenarios were proportionally higher relative to their market share by premium than were the claims of non-small and alien surplus lines insurers, but the 2019 NBCR scenario is the first modeled case in which captive insurers (which only constitute approximately five percent of the relevant market, by premium) accounted for the largest share of claims payments by actual dollar value. ¹¹⁸ This

¹¹⁷ See Mandatory and Discretionary Recoupment, 31 C.F.R. § 50.90(b) (2019); TRIA § 103(e)(7)(D).

¹¹⁸ Captive insurers did not generate the largest amount of private reinsurance participation for the San Francisco modeled loss scenario, but they did report a proportionally larger share of private reinsurance payments than did the other insurer categories.

result is consistent with information from TRIP data calls suggesting that captive insurers are more likely than other insurers to provide coverage for NBCR exposures. 119

The Dallas shopping mall scenario presented a relatively small event with insured losses that were largely absorbed with the TRIP deductible layer of the affected insurers. TRIP payments would be relatively small—approximately \$50 million—and those payments would be wholly subject to mandatory recoupment recovery by Treasury. The payments made by Treasury would be split between those made to alien surplus line insurers and captive insurers, largely because of the relatively smaller deductibles for those entities as compared to the other categories of insurers. Under this scenario, no Federal share payments would be directed to the affected non-small insurers (because those losses would be contained within each non-small insurer's TRIP deductible).

G. Terrorism Risk Insurance for Cyber Losses

Cyber insurance has been generally characterized as providing coverage 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 providing coverage for "physical damage that can be caused by cyber attacks, fraud committed by misuse of data, any liability arising from data storage," and other risks associated with "the availability, integrity and confidentiality of electronic information." ¹²⁰

Historically, cyber coverage was packaged with professional liability policies (which are not TRIP-eligible) but as the market developed, the types of coverage available evolved; and many policies providing cyber coverage are now written within TRIP-eligible lines of insurance. When cyber insurance is written under a policy that is within TRIA's definition of "property and casualty insurance" (i.e., the TRIP-eligible lines of insurance), the provisions of TRIA apply to the cyber coverage of 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. In December 2016, Treasury published guidance confirming 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. ¹²¹

¹¹⁹ For example, in the 2020 TRIP data call, captive insurers reported, based upon limits of liability, that 70 percent of the time when they provided terrorism risk insurance for property exposures they did not wholly exclude all NBCR exposures; the same figure for alien surplus lines, non-small, and small insurers combined was 58 percent.

¹²⁰ FIO, U.S. Department of Treasury, *Annual Report on the Insurance Industry* (2017), 54 https://www.treasury.gov/initiatives/fio/reports-and-notices/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).

¹²¹ 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

Treasury began collecting data on cyber insurance within the TRIP-eligible lines in the 2018 TRIP data call. In 2020, Treasury expanded its analysis of cyber insurance through a series of stakeholder engagements with industry representatives. 122 Treasury's findings are included in the following section with results from the 2018-2020 TRIP data calls, with somewhat greater emphasis on the 2019 and 2020 TRIP data calls conducted since Treasury's last Effectiveness Report.

1. The Cyber Insurance Market

The cyber insurance market remains a small but growing component of the P&C market. The NAIC estimates that the size of the U.S. cyber insurance market in 2018 was \$3.6 billion, a 14.5 percent increase over the previous year. While the United States continues to dominate the worldwide cyber insurance market, industry sources report cyber insurance premiums comprise a relatively small portion of the overall P&C market in the United States.

Stakeholders reported that the cyber insurance market continues to grow, with sufficient capacity available to meet present customer demands. The Internet of Things and other technologies are increasing the overall cyber risk exposure, as reflected in the growing frequency and severity of cyber-related losses. As a result, the primary cyber market is expected to continue growing. Multiple stakeholders noted, moreover, that the market is hardening and prices have started to increase within the past 6 to 12 months due to increasingly severe ransomware attacks.

Stakeholders also reported sufficient capacity in the reinsurance market, although some identified a need to work with multiple reinsurers to build a sufficient tower of coverage for cyber risk. Multiple stakeholders anticipated difficulty in obtaining reinsurance within the next 2

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insurance. See 81 Fed. Reg. at 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, cyber insurance can also be written as Professional Liability Insurance, which is expressly excluded from the Program. 81 Fed. Reg. at 95313; TRIA § 102(11)(B)(xi).

¹²² Treasury spoke with 16 P&C stakeholders, representing large direct insurers of cyber insurance, reinsurers, brokers, and trade associations.

¹²³ Insurers reported to NAIC a total of \$1.89 billion in written cyber premiums in 2017 and \$2.03 billion in 2018. The NAIC's estimated market size includes amounts reported to the NAIC by admitted and surplus lines insurers, plus "an estimate of the missing package cybersecurity premiums where insurers were unable to separate cybersecurity premiums from the package premium." NAIC collects cyber premium data on a direct written premium basis and Treasury collects cyber premium data on a direct earned premium basis. The NAIC figures do not include cyber insurance premiums written by alien surplus lines insurers or captive insurers. NAIC, *Report on the Cybersecurity Insurance and Identity Theft Coverage Supplement* (September 2019), 1, 4, https://content.naic.org/sites/default/files/inline-files/Cyber Supplement 2019 Report Final%20%281%29.pdf.

¹²⁴ Cyber premiums comprise less than one percent of total U.S. premiums. *See* Judy Greenwald, "Cyber Insurance Growing, Still Fraction of Industry Revenue," *Business Insurance*, July 25, 2019, https://www.businessinsurance.com/article/20190725/NEWS06/912329806/Cyber-insurance-growing-stillfraction-of-industry-revenue.

to 5 years as a result of continued growth in the primary market and aggregation concerns within the reinsurance sector.

Policy limits for cyber coverage are low in comparison to those available and taken up for other coverages under P&C policies. Cyber underwriting practices are conservative, reflecting uncertainty about aggregation risks, limits in modeling capabilities, and lack of market demand for higher limits. Most stakeholders stated that attacks on infrastructure pose the highest aggregation risk, and many cyber policies therefore have exclusions for infrastructure failures.

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. This is commonly referred to as "silent" or non-affirmative cyber risk. Opinions varied on whether non-affirmative cyber risk is also contributing to conservative underwriting practices, although stakeholders universally agreed that the industry is making progress in addressing concerns about non-affirmative cyber risk. While some stakeholders expressed confidence that the industry now has a firm understanding of its level of non-affirmative cyber risk, others suggested that these perceptions may be overly confident and that additional analysis is required.

Limits in modeling capabilities also contribute to conservative underwriting practices for cyber risk. Cyber risk modeling faces the same challenges as terrorism modeling. Such modeling can assess the extent of damage with reasonable accuracy, but the frequency of events is difficult to predict because they involve human actors who are purposely attempting to evade detection. Most stakeholders reported that they currently use a combination of internal and third-party deterministic models to inform their exposure assessments, but stated that use of probabilistic models is uncommon. 126

2. Analysis of Data Call Information

Both the TRIP data call and state regulators ask insurers to report whether their cyber policies are written on a "package" or "standalone" basis. 127 The TRIP data call instructs insurers to report policies on a standalone basis when the policy provides coverage only for cyber risk, while package policies provide broader coverage, including coverage for non-cyber losses. Some stakeholders indicated that there may be a benefit in Treasury and the NAIC clarifying the distinction between standalone and package policies, and suggested that different insurers may

¹²⁵ See FIO, 2017 Annual Report, 54. Recent regulatory and industry efforts to address non-affirmative cyber risk are described in the most recent FIO Annual Report. See FIO, U.S. Department of the Treasury, Annual Report on the Insurance Industry (2019), 40-41, https://home.treasury.gov/system/files/311/2019 FIO Annual Report.pdf. Insurers are instructed to exclude non-affirmative coverage from reporting in the TRIP data calls.

¹²⁶ While deterministic models assume that all inputs and outputs are known (e.g., using historic loss experience to estimate exposure resulting from a similar event), probabilistic models include variables to represent uncertainty and provide outputs that reflect the probability of a variety of outcomes.

¹²⁷ Both the NAIC's Cybersecurity Insurance and Identity Theft Coverage Supplement and the TRIP data call require insurers to separately report coverage provided under package and standalone policies.

be reporting similar policies differently due to different interpretations of the terms "standalone" and "package."

For the TRIP data call, respondents are required to report data for cyber policies which provide coverage for terrorism risk and are written in TRIP-eligible lines, even if the policy only responds to losses arising from non-certified acts of terrorism. Figure 39 summarizes TRIP-eligible DEP for cyber policies on a nationwide basis between 2017 and 2019.

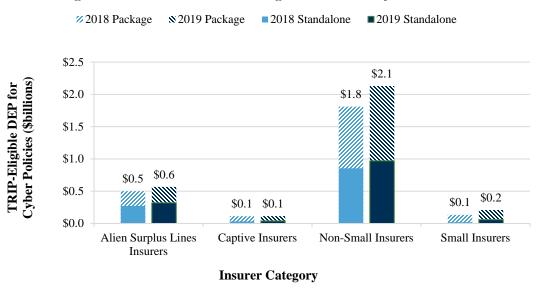


Figure 39: 2018-2019 TRIP-Eligible DEP for Cyber Policies

Source: 2019-2020 TRIP data calls

Figure 39 reflects continued market growth, with insurers reporting total TRIP-eligible cyber DEP of \$3.0 billion in 2019, up from \$2.6 billion in 2018. The market remains highly concentrated among non-small insurers, who hold over 70 percent of the market. Alien surplus lines insurers are also significant participants, with a 19 percent market share. Stakeholders cited several reasons for minimal participation by smaller insurers, who hold 7 percent of the market, including limited availability of loss data, lack of access to reliable models, and lack of specialized underwriting personnel.

The difference between NAIC estimates of the total U.S. cyber insurance market and the amounts reported to Treasury likely stems from cyber policies reported to state regulators that are written as errors & omissions and other forms of professional liability coverage, which are outside of the scope of TRIA and therefore not within the scope of Treasury's data request. Stakeholders acknowledged that a significant amount of cyber coverage is likely written in lines that are not TRIP-eligible, but suggested that the benefits of amending TRIA to encompass this

¹²⁸ Non-certified standalone policies are discussed in greater detail in Section V.B.2.

¹²⁹ 31 C.F.R. § 50.4(w)(2) (2019).

business may not outweigh the resulting costs associated with an increased insurer deductible (which would result from adding additional amounts to an insurer's total TRIP-eligible DEP). 130

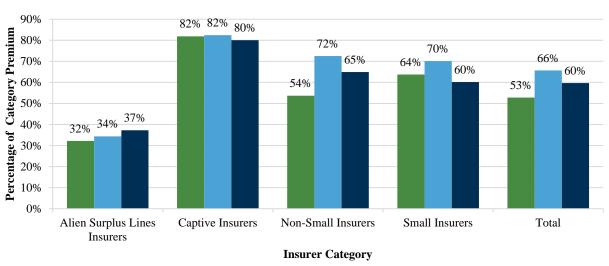
Figure 40 shows take-up rates for all cyber policies (standalone and package) providing terrorism risk coverage in each insurer category.

Figure 40: 2017-2019 Take-Up Rates for Terrorism Risk Insurance under Cyber Policies

(by TRIP-Eligible DEP)

■ 2017 ■ 2018 ■ 2019

82% 82% 80%



Source: 2018-2020 TRIP data calls

Take-up rates for cyber insurance covering terrorism risk subject to the Program, combined for all reporting insurer categories, are similar to overall take-up rates for the Program (compare Figures 15 and 16). Alien surplus lines insurers reported significantly lower take-up rates than other reporting insurer categories, which may reflect the tendency of alien surplus lines insurers to write specialized types of coverage that are not available on an admitted basis. ¹³¹

Figure 41 reflects the reported premiums charged for obtaining terrorism risk insurance associated with standalone cyber insurance policies. 132

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¹³⁰ One commenter suggested that "expansion of TRIA to include a broader range of cyber events would create a serious risk of damaging a largely successful program," adding that "TRIA is a good starting point for a discussion of a potential federal role in the cyber market, but . . . [u]ltimately, this analysis will lead to an answer for cyber different than that for terrorism." CBI GAO Cyber Comments, 53.

¹³¹ See generally FIO, 2019 Annual Report, 91-92.

¹³² Treasury requested information concerning the terrorism risk premium component of cyber coverage under both standalone cyber policies and within the cyber component of package policies. Much of the information provided in connection with package policies, however, may reflect the terrorism risk premium charged for the entire policy in question, which does not provide a good comparison point for the terrorism risk insurance component of the cyber coverage.

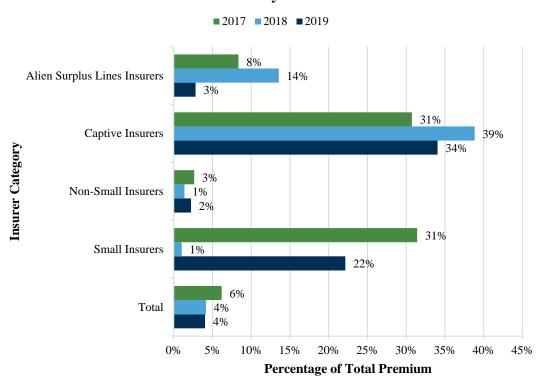


Figure 41: 2017-2019 Percentage of Total Policy DEP Allocated to Terrorism Risk Under Standalone Cyber Policies

The data in Figure 41 indicates that the average premiums associated with terrorism risk under standalone cyber policies are higher than the premiums charged for terrorism risk under general TRIP-eligible policies. This could be attributed to the fact that standalone cyber policies are being written to specifically address cyber risk (of which terrorism risk is a key component), whereas general TRIP-eligible policies reflect inclusion of a variety of risks. This is particularly notable in the context of captive insurers, who are more likely to create policies that cover a highly discrete set of risks. ¹³³

3. Application of TRIP to Cyber Terrorism Losses

Researchers have recognized that malicious cyber acts could be employed by terrorists in furtherance of their goals. 134 Depending upon the specific circumstances presented, such

¹³³ The large variation reported by small insurers in Figure 41 in premiums charged between 2017 and 2019 likely results from the fact that a limited number of small insurers are writing standalone policies. Although Treasury does not ask insurers to report the number of cyber policies issued in a given year, Figure 13 shows that small insurers reported issuing only one certified standalone terrorism policy and only 12 non-certified standalone terrorism policies in 2019.

¹³⁴ 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-Futures-Print-Version-19112017-1.pdf; Marsh, 2016 Terrorism Risk Insurance Report (July 2016), 7,

malicious cyber activity could potentially constitute an act of terrorism under TRIA. A cyber attack would need to meet the same certification criteria as any other act of terrorism. While assessing whether insured losses meet the \$5 million threshold is a fairly straightforward analysis, stakeholders indicated that the type of damage experienced in a cyber attack could make it difficult to determine if the damage constitutes a danger to "human life, property, or infrastructure" as required for certification under TRIA. Cyber events can result in significant downtime of computer systems and networks, which can result in business interruption losses. Stakeholders questioned whether such losses would be considered damage to "property" or "infrastructure." ¹³⁶

The process for meeting the attribution and motive requirements necessary to certify an act of terrorism for cyber incidents could also be difficult. Attribution of *any* terrorist attack can be difficult. ¹³⁷ Not all terrorists claim responsibility for their actions, and some terrorist groups have a history of falsely taking credit for attacks. An inability to attribute an attack to an individual or group therefore makes it difficult to determine whether an act is an "act of terrorism" as well as whether the act involved some level of "coercion" of the U.S. population or government.

Commenters and stakeholders suggested attribution difficulties could be increased in the context of a cyber incident. While detonation of a truck bomb in a city center is immediately apparent, a malicious cyber incident may not be immediately discovered; once it is, it could take weeks or months to identify the perpetrator. Even once a perpetrator is identified, identifying the motive for the attack can be equally difficult. Certification would require the ability to distinguish between general cyber crime and an act of terrorism intended to coerce.

The complexities identified above in meeting the definitional criteria of an "act of terrorism" have raised concerns among some stakeholders with respect to certification of cyber incidents. Most stakeholders considered FIO's December 2016 cyber guidance sufficient to confirm that acts of cyber terrorism could be eligible for certification. Beyond this general expression, however, some stakeholders raised actuarial and underwriting concerns based on a lack of understanding about when Treasury would consider certifying an act of cyber terrorism. These stakeholders commented that it would be helpful for Treasury to provide hypothetical scenarios

https://www.marsh.com/content/dam/marsh/Documents/PDF/US-en/2016%20Terrorism%20Risk%20Insurance%20Report.pdf.

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¹³⁵ See Section III for the statutory requirements to certify an act of terrorism under TRIA.

¹³⁶ For example, in the context of damage to property and infrastructure, one commenter questioned "would data loss and/or damage to computer systems be eligible? Would the destruction of financial accounts be considered 'damage' per the definition?" Lloyd's Comments, 4.

¹³⁷ Terrorism Risk Insurance Program: Certification, 81 Fed. Reg. 88592, 88594 (December 7, 2016), https://www.federalregister.gov/documents/2016/12/07/2016-29313/terrorism-risk-insurance-program-certification.

¹³⁸ One commenter stated that "[t]he certification process under TRIP . . . poses issues given the difficulties arising out of attribution of cyber-related losses." RAA Comments, 4.

¹³⁹ See 81 Fed. Reg. 95312 (December 27, 2016).

to help actuaries and underwriters understand the types of attacks that Treasury could envision qualifying for certification, particularly given questions raised about attribution of cyber incidents or the types of loss that would constitute damage to "life, property, or infrastructure." Treasury will continue to study the unique aspects of cyber risk and their interaction with the Program. ¹⁴⁰

Treasury also asked stakeholders to comment on the importance of the eligibility of cyber coverage within TRIA. Many agreed that potential availability of the TRIA backstop would be beneficial in a large-scale terrorism event. Researchers indicate that terrorist capabilities to execute a large-scale cyber attack remain limited, but the repercussions of such an attack could be severe. Cyber incidents are not limited by geography, and an attack can have a worldwide impact, translating into extremely high losses. Stakeholders noted that the borderless aspect of a cyber incident raises questions about whether TRIA would cover losses resulting from a cyber attack on an overseas entity, which in turn causes an affiliated U.S. entity to experience business interruption and/or contingent business interruption losses.

As the cyber market continues to develop, stakeholders cited numerous internal and industry efforts to develop commonalities in taxonomy, policy terms, and exclusions that would more appropriately reflect the cyber risks created by the embedded role of technology in today's society. Treasury will continue to monitor these stakeholder activities and the cyber terrorism insurance market in general.¹⁴²

¹⁴⁰ The ACRSM has identified the role of cyber insurance within the Program as an area deserving of further study by Treasury. *See* Section IX.

¹⁴¹ See Cambridge Centre for Risk Studies and Pool Re, *Cyber Terrorism: Assessment of the Threat to Insurance* (November 2017), 13-14, https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/risk/downloads/pool-re-cyber-terrorism.pdf.

¹⁴² GAO is also required to conduct a study on the role of cyber within TRIP under the 2019 Reauthorization Act. *See* 2019 Reauthorization Act, § 502(d).

VI. ADDITIONAL ANALYSIS ON INSURER CATEGORIES

Non-small insurers represent more than 80 percent of the market for terrorism risk insurance in the TRIP-eligible lines of insurance, as shown in Figure 1. Many of the prior analyses in this Report are heavily weighted by the experience of those non-small insurers. Treasury provides further information here concerning the other insurer categories that participate in the Program: (1) small insurers, (2) captive insurers, and (3) alien surplus lines insurers.

A. Small Insurers

In 2017 and 2019, Treasury issued studies 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. Treasury will continue to issue studies concerning the competitiveness of small insurers within the terrorism risk insurance market in alternate years, as required by TRIA. 144

The 2020 TRIP data call continues to reflect Treasury's observation that while small insurers are significant purchasers of private reinsurance, they do not uniformly obtain 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 because the Program Trigger is not met. In the 2018 Effectiveness Report and the 2019 Small Insurer Study, Treasury noted that, to some extent, reinsurance purchases by small insurers could be explained by probable maximum loss (PML) information reported for those insurers. The reported information in the 2020 TRIP data call reflects that a significant percentage of small insurers remain exposed for a PML above their Program deductible and below the Program Trigger amount, without the support of private reinsurance for that exposure. The further data now available for 2019 reflects the same trend, as shown in Figure 42.

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¹⁴³ See FIO, 2017 Small Insurer Study, 6-7 (explaining definition of small insurers by reference to application of the Program Trigger).

¹⁴⁴ TRIA § 108(h).

¹⁴⁵ See FIO, 2017 Small Insurer Study, 25-27.

¹⁴⁶ See FIO, 2018 Effectiveness Report, 57-58; FIO, 2019 Small Insurer Study, 41-43.

Average Attachment Point PML Amount Program Trigger \$300 \$265 \$241 \$250 Reinsurance (\$ millions) 200 \$200 \$140 \$150 \$126 \$117 \$112 \$84 \$78 \$100 \$62 \$50 \$51 \$47 \$42 \$39 \$50 \$0 0-5 40-60 **Insurer Program Deductible (\$ millions)**

Figure 42: 2019 Comparison Between Small Insurer Deductibles, Reported PML Figures, and Reinsurance Purchases

Source: 2020 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 42, 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 number of small insurers that remain exposed for a PML above their 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. ¹⁴⁷

U.S. domestic (domiciled or licensed) captive insurers that provide insurance in TRIP-eligible lines participate in the Program. As of December 31, 2019, there were 3,133 U.S. domiciled

¹⁴⁷ TRIA defines a captive insurer as an insurer licensed under the captive insurance laws or regulations of any state. 31 C.F.R. §50.4(g).

¹⁴⁸ See 31 C.F.R. § 50.4(o)(1)(i)(A). 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.

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. 149 The number of domestic U.S. captive insurers that write terrorism risk insurance subject to the Program for 2019, however, was 540, or approximately 17 percent of the total number of domestic U.S. captive insurers. 150

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. 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.

State insurance regulators typically have not required captive insurers to report information publicly concerning their operations. However, industry stakeholders indicate that captive insurers may issue policies for terrorism risk subject to the Program that provide coverage that otherwise might not be readily available, such as for NBCR risks or for "trophy" properties. 151 The formation of a captive insurer may 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. 152

¹⁴⁹ "Captives by State, 2018-2019," Insurance Information Institute, https://www.iii.org/table-archive/21308.

¹⁵⁰ A larger number of captive insurers write P&C insurance that is subject to the Program, but do not issue terrorism risk insurance subject to TRIP to their policyholders; those captive insurers are not required to report in the TRIP data call. The number of captive insurers reporting data to Treasury in the first mandatory TRIP data call in 2017 was 517; that figure increased to 575 in the 2018 TRIP data call, and 598 in the 2019 TRIP data call. There are also large numbers of captive insurers in non-U.S. jurisdictions, as the total number of captive insurers worldwide (including U.S. captive insurers) is now estimated to be over 7,000. See "Captive Insurance Companies," NAIC, https://content.naic.org/cipr topics/topic captive insurance companies.htm. 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 (or have otherwise qualified as an alien surplus lines insurer). Based on the 2020 TRIP data call, only one non-U.S. captive insurer reported information to Treasury as a captive insurer licensed in a particular state jurisdiction.

¹⁵¹ See VCIA Comments, 1; CIAT Comments, 3; GAO, Terrorism Insurance: Status of Efforts by Policyholders to Obtain Coverage (2008), 9, 14-16, http://www.gao.gov/assets/290/280918.pdf.

¹⁵² 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. 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 gross 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 gross premiums) is also tax-exempt. 26 U.S.C. § 501(c)(15). A non-life insurance company that meets certain diversification requirements regarding policyholders or ownership interests, with annual net written premiums (or, if greater, direct written premiums) of \$2.2 million or less in 2017, or \$2.3 million or less in 2018 and 2019, could elect to be taxed only on its taxable net investment income. 26 U.S.C. § 831(b). This premium threshold is subject to an annual inflation adjustment. 26 U.S.C. § 831(b)(2)(E). Information reported to

Captive insurers typically have premium writings (upon which Program deductible calculations are based) that are small, relative to other insurer categories. As a result, captive insurers may be able 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.¹⁵³ 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.¹⁵⁴

Captive insurers tend to insure similar TRIP exposures—property, liability, payroll (workers' compensation), and mixed—as other insurers generally. The most significant difference in exposures between captives and alien surplus lines insurers is the lack of substantial participation by alien surplus lines insurers in the market for workers' compensation insurance. Because captive insurers are typically unable, as a matter of state law, to directly provide workers' compensation insurance, most of the workers' compensation insurance issued by captive insurers is in the form of 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. Figure 43 shows the relative breakdown of TRIP exposures in 2019.

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Treasury during the 2018-2020 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.

¹⁵³ Treasury's modeled loss questions have demonstrated proportionally higher payments to captive insurers than to other insurer categories. *See* Section V.F. Commenters, as well as the ACRSM, have questioned whether the existing Program mechanics result in an appropriate level of risk sharing where captive insurers are involved. *See* CBI Captive Comments; Section IX (summary of ACRSM Report). Treasury retains the ability to address the participation of captive insurers in the Program (*see* TRIA, § 103(f)), and will consider these issues in connection with its general rulemaking authority in this area.

¹⁵⁴ 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.

¹⁵⁵ The 2020 TRIP data call showed that approximately 90 percent of the workers' compensation premiums reported by captive insurers was in connection with workers' compensation deductible reimbursement policies.

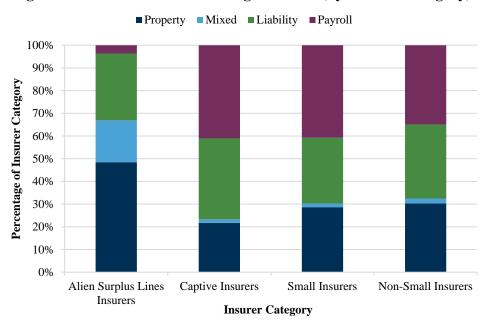


Figure 43: 2019 DEP in TRIP-Eligible Lines (by Insurer Category)

Source: 2020 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. Figure 44 reflects the distribution of policyholder industry categories within the insurance written by captive insurers that is subject to the Program.

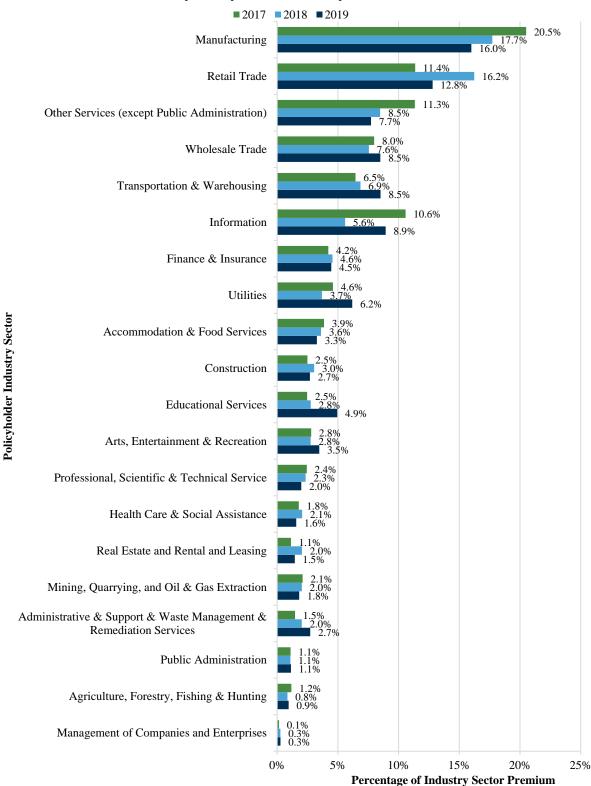
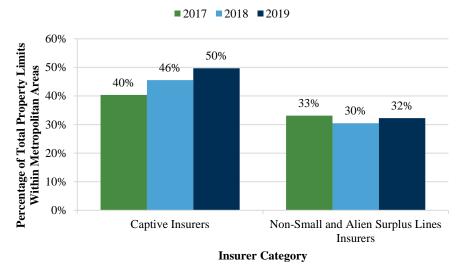


Figure 44: Captive Insurer TRIP-Eligible Lines DEP by Policyholder Industry Sectors

Source: 2018-2020 TRIP data calls

The 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, as shown in Figure 45.

Figure 45: Percentage of Total Property Limits within Metropolitan Areas for Captive Insurers Versus Non-Small and Alien Surplus Lines Insurers



Source: 2018-2020 TRIP data calls

In the 2019 TRIP data call, approximately 27.4 percent of captive insurers reported purchasing reinsurance that would cover an act of terrorism and certified under TRIA; in the 2020 TRIP data call that figure increased to 28.9 percent for acts of terrorism. 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.

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. Figure 46 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.

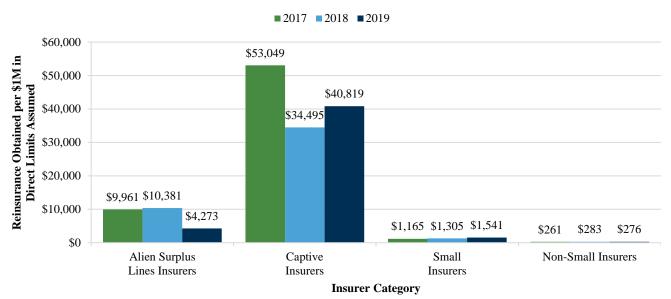


Figure 46: Reinsurance Obtained Per \$1 Million in Direct Policy Limits Subject to TRIP (Property and Liability Combined)

Source: 2018-2020 TRIP data calls

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 their financial stability and trustworthiness. Those insurers appearing on the NAIC's current Quarterly Listing of Alien Surplus Lines Insurers participate in the Program pursuant to TRIA. The companies on the Quarterly Listing 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), industry sources report that Lloyd's accounts for approximately 77 percent of the alien surplus lines DEP in the United States, while individual companies comprise the balance of 23 percent. 158

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

¹⁵⁶ See National Association of Insurance Commissioners, *Quarterly Listing of Alien Surplus Lines Insurers* (January 2020), https://www.naic.org/prod_serv/QLS-AS-2020.pdf.

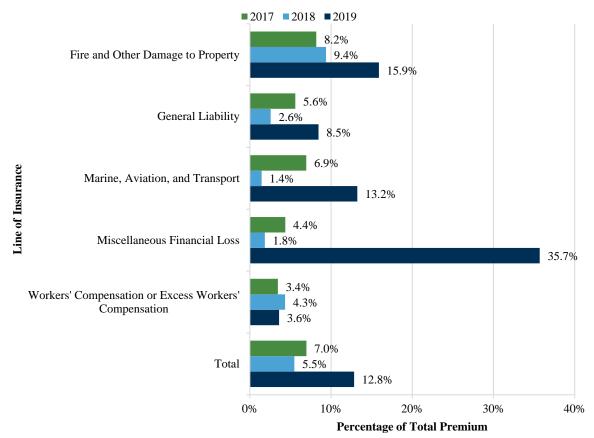
¹⁵⁷ See TRIA § 102(6); 31 C.F.R. § 50.4(o)(1)(i)(B).

¹⁵⁸ Based upon 2018 data. *See* A.M. Best, *Surplus Lines Insurers Achieve Impressive Growth, Improve Operating Profitability* (September 13, 2019), 5, http://www3.ambest.com/bestweekpdfs/sr518355119015bfull.pdf.

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 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 use in connection with their other operations. Figure 47 illustrates charges by alien surplus lines insurers for terrorism risk insurance coverage, by the lines used for alien surplus lines reporting. ¹⁵⁹

Figure 47: 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: 2018-2020 TRIP data calls

1.

¹⁵⁹ Only a very small amount of terrorism risk insurance is provided by alien surplus lines insurers for no additional charge.

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 Texas, ¹⁶⁰ requires employers to possess some form of workers' compensation insurance to cover injured employees, ¹⁶¹ although self-insurance of workers' compensation exposures is also permitted in most states. ¹⁶² Industry sources note that 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. ¹⁶³ 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. ¹⁶⁴

Unlike most lines of insurance, state laws prohibit insurers from excluding coverage for terrorism risk, including NBCR risks, in conjunction with workers' compensation coverage. Since terrorism risk cannot be excluded from a policy, the take-up rate for terrorism coverage is 100 percent as it relates to workers' compensation insurance. Furthermore, payments under

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¹⁶⁰ 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, when 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.* In addition, although Wyoming only requires workers' compensation coverage for workers in "extra-hazardous" occupations, most occupations in Wyoming are so designated under the Wyoming workers' compensation laws. *See 2019 NASI Workers' Compensation Report*, 6.

¹⁶¹ 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.

¹⁶² Based upon benefits payment history, studies indicate that self-insurance represents an estimated 24.6 percent of all workers' compensation. *See, e.g., 2019 NASI Workers Compensation Report,* 21. 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.

¹⁶³ Industry sources describe excess workers' compensation insurance as "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.

¹⁶⁴ See Section VI.B.

workers' compensation policies are only limited by the scope of benefits available under state law to employees. 165

NBCR events present a more pronounced aggregation risk than conventional terrorism claims because of NBCR incidents' potential for broad-based losses. ¹⁶⁶ An insurer cannot decline to write terrorism risk coverage (or the NBCR component of it) in conjunction with workers' compensation coverage, so workers' compensation insurers must find other ways in which to manage the aggregation risk. For example, industry sources indicate that insurers may attempt to avoid writing policies that present substantial accumulation of exposures in the same particular location. ¹⁶⁷ 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. Employers seeking coverage in such metropolitan areas who are unable to find an insurer in the voluntary market may be forced to seek coverage from the residual market, which must provide coverage to all applicants, although such coverage usually comes with a higher premium.

Workers' compensation is the largest TRIP-eligible line of insurance by total DEP, as reflected in Figure 2. 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 48.

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¹⁶⁵ See 2019 NASI Workers' Compensation Report, 8 (noting that private workers' compensation policies either provide coverage for all workers' compensation benefits, or all benefits subject to a deductible for which the policyholder is responsible).

¹⁶⁶ 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., ACRSM Report,* 24 (noting RMS maximum modeled losses for nuclear, biological, chemical, and radiological terrorism events ranging as high as \$625 billion).

¹⁶⁷ See Marsh Senate Testimony, 10 ("Organizations with a large concentration of employees are the most likely to be affected. In addition to potential price increases, they also face the possibility that their insurers will decline to renew their coverage. The issue of employee aggregation affects any employer with a large number of employees at a single location or campus, as is common among financial institutions, hospitals, defense contractors, higher education institutions, hotels, professional services companies, and nuclear power companies."); NAIC Testimony, 2-3 ("Without TRIA, workers' compensation insurers might raise prices or decline to write coverage for businesses with many employees concentrated in single locations or near iconic properties.").

Figure 48: Terrorism Risk Insurance Premiums by TRIP-Eligible Line of Insurance (Non-Small and Small Insurers) (\$ millions)

	2018 TRIP data call		2019 TRIP data call		2020 TRIP data call	
		% of		% of		% of
	2017	2017 Total	2018	2018 Total	2019	2019 Total
	Terrorism	Terrorism	Terrorism	Terrorism	Terrorism	Terrorism
	Risk DEP	Risk DEP	Risk DEP	Risk DEP	Risk DEP	Risk DEP
Aircraft (all perils)	\$ 15.7	0.6%	\$ 15.7	0.6%	\$ 15.6	0.6%
Allied Lines	109.6	4.3%	111.3	4.5%	120.9	4.7%
Boiler and Machinery	17.2	0.7%	13.3	0.5%	15.6	0.6%
Comm. Multi-Peril (liab.)	151.0	5.9%	132.1	5.4%	137.5	5.4%
Comm. Multi-Peril (non-liab.)	498.7	19.3%	455.7	18.5%	503.7	19.6%
Excess Workers' Comp.	22.2	0.9%	18.5	0.8%	16.6	0.6%
Fire	145.7	5.6%	158.5	6.4%	248.6	9.7%
Inland Marine	68.9	2.7%	74.5	3.0%	66.2	2.6%
Ocean Marine	10.6	0.4%	12.1	0.5%	22.8	0.9%
Other Liability	378.1	14.7%	349.4	14.2%	415.0	16.2%
Products Liability	28.1	1.1%	11.7	0.5%	12.4	0.5%
Workers' Compensation	1,132.9	43.9%	1,115.5	45.2%	988.7	38.6%
Total	\$ 2,578.6	100.0%	\$ 2,468.3	100.0%	\$ 2,563.6	100.0%

Source: 2018-2020 TRIP data calls

The premiums charged for terrorism risk insurance in the workers' compensation line in 2019 varies by jurisdiction, from a high of 13.2 percent of total premiums when a charge is made in the District of Columbia, to a low of 0.6 percent in Alaska. Figure 49 illustrates the charges on a state-by-state basis across the country in 2019.

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¹⁶⁸ In three jurisdictions where all workers' compensation insurance is provided by a state entity (North Dakota, Ohio, and Washington), no additional charge is made for the terrorism risk portion of the coverage.

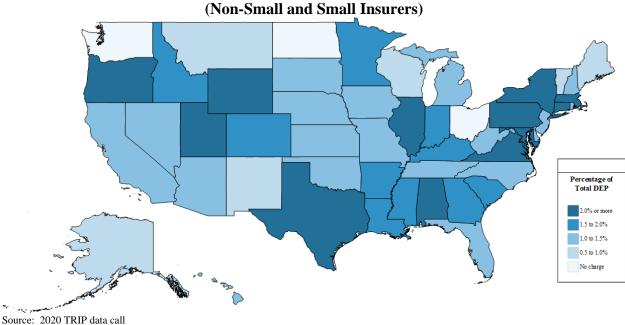


Figure 49: 2019 Terrorism Risk Insurance Premiums for Workers' Compensation as a Percentage of Total TRIP-Eligible DEP when a Charge is Made

Insurance rates for terrorism risk insurance in the workers' compensation line are based, at least in part, upon terrorism catastrophe modeling that estimates the potential impact of terrorist attacks upon workers' compensation insurers. ¹⁶⁹ In the development of loss costs on a state-by-state basis, industry sources report that the impact of the Program is considered, ¹⁷⁰ which shows that, in the absence of the Program, indicated costs—and thus associated premium

In sum, the Program constitutes an important feature of the existing market for workers' compensation insurance in the United States, and observers note that there could be disruptions to the market in the absence of the Program. This is largely on account of the nature of the insurance coverage that must be provided as a matter of state law for workers' compensation exposures. Commenters indicated that the market as a whole has been relatively stable for the past decade. The past decade.

rates—could be higher than at present.

¹⁶⁹ NCCI Comments, 3-4.

¹⁷⁰ NCCI Comments, 4.

¹⁷¹ APCIA Testimony, 3 ("Thus, for workers compensation insurers, TRIA is important to providing private terrorism insurance market stability, and to preventing broader workers compensation availability problems that could result in the absence of the program.").

¹⁷² NCCI Comments, 3-4.

VIII. TERRORISM RISK PREMIUMS EARNED OVER TIME

TRIA requires that Treasury provide in each Effectiveness Report an estimate of the total amount of premiums earned on terrorism risk insurance since January 1, 2003.¹⁷³ In the 2018 Effectiveness Report, Treasury determined that as much as \$38.0 billion was earned by nonsmall, small, and alien surplus lines insurers between 2003 and 2017, with an additional \$7.4 billion earned by captive insurers during this period.¹⁷⁴ Based on the information reported for 2018 and 2019, Treasury now estimates that non-small, small, and alien surplus lines insurers earned approximately \$43.2 billion in terrorism risk insurance premiums between 2003 and 2019, with captive insurers earning an additional \$8.7 billion.

A. Non-Small and Small Insurers

Figure 50 provides information on terrorism risk insurance premiums earned by non-small and small insurers in 2018 and 2019 and the percentage of total TRIP-eligible DEP represented by that figure.

Figure 50: Terrorism Risk Insurance DEP, Non-Small and Small Insurers

	2019 TF	RIP data call	2020 TRIP	data call	
	2018	2018 % of Category's		% of Category's	
	Terrorism Risk	2018 TRIP-	Terrorism Risk	2019 TRIP-	
	Insurance DEP	Eligible DEP	Insurance DEP	Eligible DEP	
Non-Small Insurers	\$ 2,304,674,672	1.4%	\$ 2,306,426,121	1.3%	
Small Insurers	163,615,205	0.7%	257,165,412	1.1%	
Total	\$ 2,468,289,877	1.3%	\$ 2,563,591,533	1.3%	

Source: 2019 and 2020 TRIP data calls

Figure 50 indicates that that non-small and small insurers earned approximately \$5.0 billion in terrorism risk insurance premiums in 2018 and 2019. Adding in the prior figure of \$35.6 billion reported in the 2018 Effectiveness Report, small and non-small insurers earned \$40.6 billion in terrorism risk insurance premiums between 2003 and 2019.

B. Alien Surplus Lines Insurers

Figure 51 provides information on terrorism risk insurance premiums earned by alien surplus lines insurers in 2018 and 2019 and the percentage of total TRIP-eligible DEP represented by that figure.

¹⁷³ TRIA § 104(h)(2)(F).

¹⁷⁴ FIO, 2018 Effectiveness Report, 71-75 (using reported estimates for the years 2003 through 2015, coupled with the data directly reported for 2016 and 2017).

Figure 51: Terrorism Risk Insurance DEP, Alien Surplus Lines Insurers

	2019 TRIP data call		2020 TRIP d	ata call
	2018	% of Category's	2019	% of Category's
	Terrorism Risk	2018 TRIP-	Terrorism Risk	2019 TRIP-
	Insurance DEP	Eligible DEP	Insurance DEP	Eligible DEP
Alien Surplus Lines Insurers	\$ 136,196,927	1.8%	\$ 447,711,978	4.0%

Source: 2019 and 2020 TRIP data calls

In 2018 and 2019, alien surplus lines insurers earned approximately \$583.9 in terrorism risk insurance premiums. Adding the 2018 and 2019 information received in the TRIP data calls to the prior figure of \$2.0 billion reported in the 2018 Effectiveness Report, Treasury estimates that alien surplus lines insurers earned approximately \$2.6 billion in terrorism risk insurance premiums between 2003 and 2019.

C. Captive Insurers

Figure 52 provides information on terrorism risk insurance premiums earned by captive insurers in 2018 and 2019 and the percentage of total TRIP-eligible DEP represented by that figure.

Figure 52: Terrorism Risk Insurance DEP, Captive Insurers

		/ 1			
	2019 TRI	2019 TRIP data call		data call	
	2018	% of Category's	2019	% of Category's	
	Terrorism Risk	2018 TRIP-	Terrorism Risk	2019 TRIP-	
	Insurance DEP	Eligible DEP	Insurance DEP	Eligible DEP	
Captive Insurers	\$ 661,389,289	7.4%	\$ 670,658,260	7.5%	

Source: 2019 and 2020 TRIP data calls

Captive insurers earned approximately \$1.3 billion in terrorism risk insurance premiums in 2018 and 2019. Adding to the prior figure of \$7.4 billion reported in the 2018 Effectiveness Report, Treasury estimates that captive insurers earned approximately \$8.7 billion in terrorism risk insurance premiums between 2003 and 2019.

D. Aggregate Industry Totals

Treasury estimates that non-small, small, and alien surplus lines insurers, in the aggregate, earned as much as \$43.2 billion in terrorism risk insurance premiums between 2003 and 2019, with captive insurers earning an additional \$8.7 billion. Based on the information provided by the domestic admitted market, this represents between 1 and 2 percent of total TRIP-eligible lines premiums earned over the entire period.

Treasury will continue to update these figures in future Effectiveness Reports with the results of future TRIP data calls as they are conducted.

IX. ADVISORY COMMITTEE ON RISK-SHARING MECHANISMS

A. Background

The Advisory Committee on Risk-Sharing Mechanisms was created by the 2015 Reauthorization Act. ¹⁷⁵ By statute, the ACRSM is to be made up of directors, officers, or other employees of insurance industry participants that participate or desire to participate in nongovernmental risk sharing mechanisms for terrorism risk. ¹⁷⁶ Its role is to provide Treasury with "advice, recommendations, and encouragement with respect to the creation and development of . . . nongovernmental risk-sharing mechanisms" for terrorism risk. ¹⁷⁷

The ACRSM was formed in 2015¹⁷⁸ and currently has eight members.¹⁷⁹ It has held 10 meetings since its formation, beginning in February 2016 and most recently in May 2020.¹⁸⁰ During these meetings, the committee received presentations from a variety of industry stakeholders, including ACRSM members, academics, risk modeling companies, and other domestic and foreign risk sharing entities.¹⁸¹ The ACRSM also formed subcommittees that focused upon individual subject matter areas—primary (direct) insurers, reinsurers, capital markets, other terrorism risk insurance approaches, and consumer interests—relevant to the committee's inquiries.¹⁸² Through the work of the subcommittees, the ACRSM developed a draft report containing initial recommendations to Treasury relating to the Program, which the ACRSM adopted as its initial Report on May 11, 2020.

B. ACRSM Report Findings

The major findings of the ACRSM Report include the following:

¹⁷⁵ 2015 Reauthorization Act, § 110.

¹⁷⁶ 2015 Reauthorization Act, § 110(b)(3).

¹⁷⁷ 2015 Reauthorization Act, § 110(b)(2).

¹⁷⁸ Advisory Committee on Risk-Sharing Mechanisms for Reinsurance Against Losses Arising from Acts of Terrorism, *Charter* (March 30, 2015), https://home.treasury.gov/system/files/311/ACRSM_Charter.pdf. The Charter is renewed biennially; the current 2019 Charter also is available on Treasury's website at https://home.treasury.gov/system/files/311/ACRSM_2019_Charter.pdf.

¹⁷⁹ "Advisory Committee on Risk-Sharing Mechanisms (ACRSM)," Treasury, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/terrorism-risk-insurance-program/advisory-committee-on-risk-sharing-mechanisms-acrsm.

¹⁸⁰ Meeting agenda, minutes, and presentation materials are available on Treasury's website. "Advisory Committee on Risk-Sharing Mechanisms (ACRSM)," Treasury https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/terrorism-risk-insurance-program/advisory-committee-on-risk-sharing-mechanisms-acrsm.

¹⁸¹ ACRSM Report. 4.

¹⁸² See Advisory Committee on Risk-Sharing Mechanisms, *Proposed Project Plan* (December 15, 2016), https://home.treasury.gov/system/files/311/Proposed Project Plan.pdf.

- (1) "With TRIP in place, terrorism coverage is available and generally affordable";
- (2) "As long as insurers are required to offer terrorism coverage, the industry needs a cap on liabilities for losses arising from terrorism events in order to properly price the risk and provide coverage";
- (3) "There has been and will continue to be a major transference of conventional terrorism coverage from the government to the private sector, but this transference may not be as large for complicated risks presenting significant aggregation exposure, such as cyber and NCBR";
- (4) "Questions and uncertainty remain about the certification process and timing";
- (5) "The use of alternative carrier mechanisms, such as captive insurers, can create unbalanced benefits from TRIP as well as issues post-loss";
- (6) "Mandatory Recoupment and the growing IMARA can lead to unintended results";
- (7) "Cyber coverage needs to be studied"; and
- (8) "Total available limits, both public and private, for NCBR coverage remain an issue." 183

C. ACRSM Report Recommendations

Based upon its findings, the ACRSM adopted a series of recommendations for FIO in its administration of the Program. The committee divided its recommendations into short-term and long-term recommendations for further FIO study and analysis.

The committee's short-term recommendations to FIO are to:

- (1) "Evaluate the evolving cyber market in the context of the Program," while identifying a number of specific areas of interest;
- (2) Explore the coverage provided by the Program for NBCR terrorism risk, including whether the current Program mechanics are appropriate for such exposures, the risk of NBCR exposures above the \$100 billion Program Cap, and the impact of state "fire following" laws upon the coverage provided by the Program; ¹⁸⁴ and
- (3) "Explore ways to resolve uncertainty over the certification process," including (a) clarifying whether non-U.S. cyber losses affecting U.S. interests can be covered and certified under the Program, (b) permitting in some circumstances interested parties to petition for a certification process, and (c) shortening certain timelines and increasing public notice requirements. 185

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¹⁸³ ACRSM Report, 5.

¹⁸⁴ The potential effects of state "fire following" laws on TRIP were identified by FIO in a prior Effectiveness Report. *See* FIO, *2018 Effectiveness Report*, note 84.

¹⁸⁵ Commenters have also suggested revisions or further study of Treasury's certification processes. *See* RAA Comments, 4; Lloyd's Comments, 2; CIAT Comments, 3.

The Committee's long-term recommendations to FIO are to:

- (1) Examine the potential impact on the Program of indexing the IMARA;
- (2) Evaluate the recoupment concept for the recovery of government expenditures, including whether there should be a mechanism to prevent the government from recouping more than it pays for a terrorist attack;
- (3) Examine ways to limit the incentives that currently exist to use alternative carriers mechanisms, such as captive insurers, to shift terrorism risk to other parties, including whether direct earned premium is an appropriate measurement for the calculation of deductibles and co-shares of such insurers;
- (4) Explore ways for FIO to facilitate terrorism risk transfer to global markets, including whether changes in the administration of the Program to improve terrorism risk modeling, evaluation of risk exposure, and mitigation efforts can contribute to that goal; and
- (5) Consider expanding FIO's review of the availability and affordability of terrorism risk insurance for places of worship to include non-profit entities generally. 186

The ACRSM Report's Appendix includes additional background and analytical material relating to its findings and recommendations. 187

D. ACRSM Report and Treasury's Next Steps

The ACRSM report identifies issues for further study and evaluation by FIO. Treasury intends to analyze and evaluate these recommendations and issues as FIO continues its administration of the Program. The ACRSM plans to continue meeting in the future, and Treasury will continue to engage with both the ACRSM and stakeholders.

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¹⁸⁶ ACRSM Report, 6.

¹⁸⁷ ACRSM Report, 7-28.

¹⁸⁸ In addition to the work of the ACRSM, the GAO also recently completed two reports addressing various aspects of the Program. See GAO, Terrorism Risk Insurance: Program Changes Have Reduced Federal Exposure (GAO-20-348), https://www.gao.gov/assets/710/706243.pdf (GAO Program Changes); GAO, Terrorism Risk Insurance: Market Is Stable but Treasury Could Strengthen Communication about Its Processes (GAO-20-364), https://www.gao.gov/assets/710/706252.pdf (GAO TRIP Processes). In the GAO Program Changes report, GAO found that "TRIA has been largely effective in meeting its statutory objectives of stabilizing the terrorism risk insurance market," notwithstanding reductions in federal fiscal exposure over time, although it recommended that Treasury communicate to insurers how it would use policyholder retention amounts in calculating "insurance losses" and "insured losses" in determining the program certification threshold, trigger, and cap, as applicable. In the GAO TRIP Processes report, GAO found that TRIA's federal backstop remains crucial to the continued stability of the terrorism risk insurance market, and determined that stakeholders generally understood the TRIP claims process, but recommended that Treasury provide further communications concerning the certification process, and otherwise further document working procedures with the Departments of Homeland Security and Justice concerning the process. Treasury will address the GAO recommendations in conjunction with the recommendations of the ACRSM.

X. CONCLUSION

The 2019 Reauthorization Act extended the Program for an additional seven years until 2027 based upon the Program structure in place as of 2020. Treasury's evaluation of the relevant data concerning the Program indicates, consistent with the views expressed by a large number of market participants, that TRIP has helped make terrorism risk insurance available and affordable in the United States, and that the market for terrorism risk insurance has been relatively stable for the past decade. While the Program does not mandate the purchase of terrorism risk insurance, 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.

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 continued limited amount of reinsurance available for NBCR events, which pose the greatest risk of causing catastrophic industry losses on a broad scale.

Treasury and FIO will continue to evaluate and analyze whether the Program is meeting its objectives. Changed circumstances and continued market developments must be assessed over time to make certain that the Program, established in the wake of the September 11 attacks, remains properly tailored in today's world to continue to support terrorism risk insurance in an efficient and appropriate manner. The recent Report of the ACRSM identified a number of areas for further study and evaluation by Treasury relating to such issues. Treasury will evaluate and address those issues, including matters related to the cyber terrorism insurance market.

This analysis is based principally on the 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 TRIA.

APPENDIX 1: 2019 TAKE-UP RATES BY STATE

This table sets forth numerically the 2019 take-up rates, based upon DEP (presented graphically in Figure 20 by state for small and non-small insurers combined). It provides the separate experience of small and non-small insurers, and then provides the combined figure as well. Workers' compensation is not included within these figures, although excess workers' compensation is included.

Alabama 64% 71% 65% Alaska 45% 66% 48% Arizona 67% 53% 66% Arkansas 70% 66% 70% California 63% 37% 61% Colorado 63% 42% 61% Connecticut 72% 72% 72% Delaware 64% 61% 64% District of Columbia 67% 81% 68% Florida 56% 31% 51% Georgia 69% 66% 68% Hawaii 55% 83% 59% Idaho 62% 70% 63% Illinois 69% 35% 63% Indiana 64% 79% 66% Ilowa 66% 70% 66% Kansas 69% 56% 68% Kentucky 70% 54% 68% Louisiana 55% 48% 55%		Non-Small Insurers	Small Insurers	Combined
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Illinois	Hawaii	55%	83%	59%
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New Jersey 68% 68% 68% New Mexico 69% 61% 69% New York 67% 61% 66% North Carolina 72% 77% 73%	New Hampshire	67%	80%	69%
New York 67% 61% 66% North Carolina 72% 77% 73%	New Jersey	68%		68%
New York 67% 61% 66% North Carolina 72% 77% 73%	New Mexico	69%	61%	69%
12/0 17/0 15/0	New York	67%		66%
W. A.B.L.	North Carolina	72%	77%	73%
	North Dakota	60%	62%	60%

	Non-Small Insurers	Small Insurers	Combined
Ohio	71%	69%	70%
Oklahoma	68%	57%	67%
Oregon	66%	58%	65%
Pennsylvania	72%	71%	71%
Rhode Island	73%	59%	72%
South Carolina	64%	71%	65%
South Dakota	56%	71%	58%
Tennessee	71%	62%	71%
Texas	60%	53%	60%
Utah	68%	46%	67%
Vermont	66%	92%	71%
Virginia	70%	68%	70%
Washington	63%	50%	62%
West Virginia	69%	62%	69%
Wisconsin	68%	67%	68%
Wyoming	66%	50%	65%

Source: 2020 TRIP data call

APPENDIX 2: 2019 TAKE-UP RATES BY STATE AND LINE GROUPS

This table contains more detailed take-up information for small and non-small insurers, by state and by groups of TRIP-eligible lines of insurance. In order to streamline the presentation, and provide information by more general categories of information, Treasury displays the information by the following categories: (1) Property Insurance; ¹⁸⁹ and (2) Liability Insurance. ¹⁹⁰ Evaluation of Appendix 2 permits identification of differences in take-up, on a state-by-state basis, as between small insurers and non-small insurers, by the more general coverage categories identified.

	Non-	Small	Sn	nall	Combined	
	Property	Liability	Property	Liability	Property	Liability
Alabama	69%	62%	77%	68%	70%	63%
Alaska	48%	47%	77%	62%	53%	50%
Arizona	81%	64%	67%	45%	80%	62%
Arkansas	75%	66%	76%	57%	75%	65%
California	74%	58%	42%	35%	71%	56%
Colorado	70%	60%	59%	31%	69%	57%
Connecticut	82%	72%	80%	61%	82%	71%
Delaware	81%	64%	75%	64%	80%	64%
District of Columbia	85%	70%	89%	70%	86%	70%
Florida	53%	58%	23%	46%	45%	56%
Georgia	79%	64%	82%	54%	79%	63%
Hawaii	60%	53%	91%	78%	66%	57%
Idaho	74%	60%	81%	62%	75%	60%
Illinois	81%	64%	84%	22%	81%	54%
Indiana	66%	63%	81%	77%	68%	65%
Iowa	74%	63%	81%	71%	75%	64%
Kansas	75%	64%	71%	36%	74%	62%
Kentucky	71%	67%	55%	53%	69%	66%
Louisiana	55%	54%	59%	45%	56%	53%
Maine	77%	67%	95%	88%	81%	71%
Maryland	83%	73%	85%	74%	83%	73%
Massachusetts	79%	67%	79%	49%	79%	65%
Michigan	80%	69%	80%	72%	80%	69%
Minnesota	70%	62%	79%	65%	72%	62%
Mississippi	70%	65%	71%	55%	70%	64%
Missouri	78%	62%	79%	40%	78%	59%
Montana	72%	60%	56%	47%	70%	58%
Nebraska	73%	64%	78%	57%	74%	63%
Nevada	76%	62%	51%	41%	74%	61%

 $^{^{189}}$ Fire, Allied Lines, Boiler & Machinery, and Commercial Multi-Peril (Property) combined.

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¹⁹⁰ Commercial Multi-Peril (Liability), Products Liability, and Other Liability combined.

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

Source: 2020 TRIP data call