



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

October 29, 2007

### **Terrorism Risk Insurance Program Reauthorization Act of 2007**

*As ordered reported by the Senate Committee on Banking, Housing, and  
Urban Affairs on October 17, 2007*

#### **SUMMARY**

Congressional Budget Office (2007, October 29). Cost estimate, S. 2285: Terrorism Risk Insurance Program Reauthorization Act of 2007. At <https://www.cbo.gov/sites/default/files/110th-congress-2007-2008/costestimate/triasenate0.pdf> (retrieved 11 March 2016).

This legislation would extend the Terrorism Risk Insurance Act (TRIA) for seven years—through calendar year 2014. The bill also would require insurers to make coverage available to property and casualty policyholders for losses resulting from domestic terrorism.

Enacted in 2002, TRIA requires insurance firms that sell commercial property and casualty insurance to offer clients insurance coverage for damages caused by foreign terrorist attacks. Under TRIA, the federal government would help insurers cover losses in the event of a terrorist attack under certain conditions, and would also impose assessments on the insurance industry to recover all or a portion of the federal payments. The program is set to expire at the end of calendar year 2007.

There is no reliable way to predict precisely how much insured damage terrorists might cause, if any, in any specific year. Rather, CBO's estimate of the cost of financial assistance provided under the bill represents an expected value of payments from the program—a weighted average that reflects industry experts' opinions of various outcomes ranging from zero damages up to very large damages resulting from possible future terrorist attacks. The expected value can be thought of as the amount of an insurance premium that would be necessary to just offset the government's losses from providing this insurance, although firms do not pay any premium for the federal assistance offered by TRIA.

On this basis, CBO estimates that enacting the bill would increase direct spending by \$3.1 billion over the 2008-2012 period and by \$6.6 billion over the 2008-2017 period. An additional \$1.1 billion would be spent after 2017.

Under the legislation, the Department of the Treasury would be directed to recoup some or all of the costs of providing financial assistance through taxes imposed on insurance firms (surcharges). Over many years, CBO expects that an increase in spending for financial assistance would be largely offset (on a cash basis) by a corresponding increase in

governmental receipts (i.e., revenues) depending on the amount of insured losses. We assume, however, that the Secretary of the Treasury would not impose any surcharges until two years after federal assistance is provided and that those amounts would be collected over many years. Thus, CBO estimates that enacting the recoupment provision in the bill would increase governmental receipts by about \$100 million over the 2008-2012 period and by \$1.5 billion over the 2008-2017 period, net of income and payroll tax offsets.

Considering both the direct spending and revenue impacts of the bill, CBO estimates that enacting the bill would increase budget deficits or decrease surpluses by \$200 million in 2008, \$3.0 billion over the 2008-2012 period, and \$5.1 billion over the 2008-2017 period. Pursuant to section 203 of S. Con. Res. 21, the Concurrent Resolution on the Budget for fiscal year 2008, CBO estimates that enacting the bill would not result in a deficit increase of more than \$5 billion in any of the four 10-year periods following 2017.

Enacting the bill could affect potential future spending for disaster relief, which is subject to appropriation, or potential future changes in revenues resulting from tax legislation that might be enacted in the aftermath of an attack. Any potential savings from this effect would depend on future discretionary spending decisions or future tax legislation, and thus would not be available—for scorekeeping purposes—to offset the estimated direct spending cost of extending TRIA in this legislation.

The bill would extend and impose intergovernmental and private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). CBO estimates that the aggregate costs of complying with those mandates would not exceed the annual thresholds established by UMRA (\$66 million for intergovernmental mandates and \$131 million for private-sector mandates in 2007, adjusted annually for inflation.)

## **ESTIMATED COST TO THE FEDERAL GOVERNMENT**

The estimated budgetary impact of the Terrorism Risk Insurance Program Reauthorization Act of 2007 is shown in the following table. The costs of this legislation fall within budget function 370 (commerce and housing credit).

---

**ESTIMATED BUDGETARY IMPACT OF THE TERRORISM RISK INSURANCE PROGRAM  
REAUTHORIZATION ACT OF 2007**

---

	By Fiscal Year, in Billions of Dollars											2008- 2012	2008- 2017
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2012	2017	
CHANGES IN DIRECT SPENDING													
Estimated Budget Authority	0.2	0.5	0.7	0.8	0.9	1.0	1.0	0.8	0.5	0.2	3.1	6.6	
Estimated Outlays	0.2	0.5	0.7	0.8	0.9	1.0	1.0	0.8	0.5	0.2	3.1	6.6	
CHANGES IN REVENUES													
Estimated Revenues	0	0	*	*	0.1	0.1	0.2	0.3	0.4	0.4	0.1	1.5	
NET IMPACT													
Estimated Change in the Deficit or Surplus <sup>a</sup>	-0.2	-0.5	-0.7	-0.8	-0.8	-0.9	-0.8	-0.5	-0.1	0.2	-3.0	-5.1	

Note: \* = less than \$50 million.

a. Negative numbers indicate an increase in the deficit or a decrease in the surplus.

---

## **BASIS OF ESTIMATE**

For this estimate, CBO assumes that the legislation will be enacted before the end of calendar year 2007. We estimate that enacting the bill would increase direct spending by \$6.6 billion and would increase governmental revenues by \$1.5 billion over the 2008-2017 period. While this estimate reflects CBO's best judgment on the basis of available information, the cost of this federal program is a function of inherently unpredictable future terrorist attacks. As such, actual costs are likely to vary significantly from the estimated amounts. Such costs could be either higher or lower than the expected-value estimates provided for each year.

## **Terrorism Risk Insurance Act Under Current Law**

Enacted in 2002 and reauthorized in 2005, the Terrorism Risk Insurance Act provides financial assistance to commercial property and casualty insurers for losses above certain thresholds caused by terrorist attacks by individuals acting on behalf of foreign interests. For such assistance to be provided, the Secretary of the Treasury must certify that a terrorist

attack has occurred in the United States or other specified locations. TRIA is currently set to expire on December 31, 2007.

TRIA does not require commercial property and casualty insurance policies to cover losses from terrorist attacks committed by a domestic interest or those involving nuclear, biological, chemical, or radioactive materials. If an insurer and a policyholder choose to include losses from terrorist attacks involving nuclear, biological, chemical, or radiological (NBCR) materials in a policy, TRIA would cover a portion of the losses resulting from those risks.

For the Secretary of the Treasury to certify a terrorist attack, insured damages resulting from the attack must exceed \$5 million. Financial assistance becomes available to insurers suffering losses from a certified attack once the industry's aggregate insured losses from that attack exceed \$100 million (in 2007). Once that \$100 million threshold is exceeded, participating insurance companies that suffer losses are responsible for paying claims up to a deductible amount based on the premiums they collected for covered lines in the calendar year preceding a certified attack. In 2007, the deductible is 20 percent of such premiums.

After meeting their individual deductibles for damage claims, insurers and the federal government would each pay a portion of the loss above the deductible (the federal government would pay 85 percent of insured losses in 2007, individual insurers, 15 percent) up to total losses of \$100 billion. The law does not address about how losses above the \$100 billion cap would be handled.

The Secretary of the Treasury is authorized to recover payments made by the federal government through taxes in the form of surcharges paid by the insurance industry and purchasers of commercial property and casualty insurance. The Secretary is required to recoup federal payments to the extent that the total amount paid by the insurance industry, including the deductible, is less than the industry "retention amount" specified in law, which represents the total liability of the property and casualty insurance industry in the event of a certified attack. In 2007, that amount is \$27.5 billion.

### **Modifications to TRIA Under the Bill**

The legislation would extend TRIA for seven years, through December 31, 2014. The bill also would eliminate the distinction between foreign and domestic terrorist attacks. TRIA would now cover attacks by either foreign or domestic interests.

As under current law, an insurer suffering losses as a result of an attack would pay claims up to a specified deductible. The bill would maintain the same deductible limits as in current law, 20 percent of the premiums collected by each property and casualty insurer in the calendar year preceding an attack.

Likewise, the bill would continue the payment-sharing process that exists under current law. Insurers and the federal government would each pay a portion of the loss over the deductible. The federal government's portion would remain 85 percent of insured losses up to the \$100 billion limit for each year of the seven-year extension of the program.

## **Direct Spending**

By extending financial assistance to certain commercial insurers for future acts of terrorism against insured private property, enacting the bill would expose the federal government to potentially large liabilities for seven more years (2008 through 2014). For any particular year, the amount of insured damage caused by terrorists could range from zero to many billions of dollars. CBO's estimate of the cost of this program reflects how much, on average, the government could be expected to pay to insurers and recover from the industry over the 2008-2017 period.

The following sections describe our method for estimating the expected value of financial assistance under the bill and explain how we convert that cost to annual estimates of spending.

**Estimating the Expected Cost of Federal Assistance.** For this estimate, CBO discussed the concepts involved in estimating insured losses with industry actuaries and reviewed models used by firms to set premiums for the terrorism component of property and casualty insurance and group life insurance that they offer. State insurance regulators generally require such premiums to be grounded in a widely accepted model of expected losses from covered events. After the terrorist attacks on September 11, 2001, the insurance industry began efforts to set premiums for insurance coverage for terrorist events using such models.

Although estimating losses associated with terrorist events is difficult because of the lack of meaningful historical data, the insurance industry has experience setting premiums for catastrophic events—namely, natural disasters. Setting premiums for hurricanes and earthquakes, for example, involves determining areas that could sustain damage, the value of the losses that could result from various types of events with different levels of severity, and the frequency of such events.

Similarly, estimating premiums for losses resulting from terrorist attacks involves judgments regarding potential targets and the frequency of such attacks. Because there is a very limited history of terrorist attacks in the United States, many of the parameters needed by the insurance industry to set premiums are based on expert opinion regarding terrorist activities and capabilities rather than on historical data.

*Estimating potential insured losses.* Based on discussions with insurers and information provided by the insurance industry, CBO estimates that the expected or average annual loss subject to TRIA coverage under the bill would be about \$2.3 billion (in 2007 dollars). This estimate incorporates industry expectations of the probabilities of terrorist attacks, encompassing the possibility of attacks that result in enormous loss of life and property damage, as well as a significant likelihood that no such attacks would occur in any given year. This estimate also reflects our expectation that some portion of losses from terrorism would not be covered by TRIA because some policyholders would choose not to purchase insurance coverage for terrorism risks.

Our estimate of expected annual losses covered by TRIA under the bill includes around \$150 million for the inclusion of coverage for domestic terrorism.

The estimate includes about \$800 million in expected annual losses resulting from terrorist attacks involving NBCR materials. Under current law, insurers are not required to offer this coverage, although if an insurer and a policyholder voluntarily agree to include this coverage in a policy, TRIA would cover some of those losses. While the bill would not require insurance policies to include coverage for losses resulting from attacks using NBCR materials, information provided by the industry indicates that a small amount of coverage is currently in place for such losses. Thus, under the bill, the government's exposure to losses resulting from terrorist attacks involving NBCR materials would likewise be small as compared with losses resulting from attacks using conventional materials, except in the workers' compensation insurance line, where no exclusions are allowed.

CBO's estimate assumes that, in most years, losses from terrorist attacks covered by TRIA would cost significantly less than \$2.3 billion. We expect that there is a significant chance that no terrorist attacks that would be covered by TRIA would occur in a given year. Since enactment of TRIA, no covered events have occurred; it is unclear whether no such attacks were planned or attempted, or whether some were prevented by law enforcement and other security measures. Although the risk of a terrorist attack with many lives lost and substantial property damage still remains, based on industry models, CBO assumes for this estimate that attacks causing losses similar in scale to those sustained on September 11, 2001, in New York City are likely to occur very rarely.<sup>1</sup>

*Determining the federal share of insured losses.* Federal payments under TRIA would be lower than expected losses from terrorist attacks because TRIA places limits on eligibility for federal assistance and requires that insurers pay a share of covered losses. CBO took account of those requirements to calculate federal spending for any given amount of insured losses from future terrorist attacks.

---

1. Industry losses on September 11, 2001, are estimated to be about \$36 billion (in 2006 dollars), including about \$30 billion in losses in New York City that would have qualified for coverage under TRIA had the law been in effect on that date.

First, because federal payments under TRIA would be capped at \$100 billion per event, we excluded costs for potential losses above that level. The bill would maintain the minimum losses set under current law that would trigger federal payments under TRIA at \$100 million.

Second, we accounted for the share of losses that would be paid by affected insurers in the event of a covered attack. Before the federal government would make any payments under TRIA, an insurer incurring losses would first pay claims up to a deductible amount. The bill would maintain the current-law deductible of 20 percent of certain premiums collected by property and casualty insurers in the calendar year preceding an attack.

The total amount of claims paid by insurers below the deductible amount could range from a few million dollars to several billion dollars, depending on how many insurers provide coverage for losses resulting from a particular terrorist attack. In addition, the value of each individual insurer's deductibles would vary greatly across the industry. For this estimate, CBO considered a range of possibilities regarding the share of federal assistance, based on industry data regarding estimated insurers' deductibles under the bill. The range encompasses the possibility that an attack would affect only a few insurers with relatively small deductibles or several insurers with relatively large deductibles. CBO expects that insured losses below a few hundred million dollars would most likely be covered by insurers' deductibles, and therefore, would not result in a significant increase in federal spending.

Finally, once affected insurers have paid claims up to their deductibles, the federal government would share a portion of the losses above the deductible with each insurer. Under this legislation, the federal government's share of claims above the deductible would be 85 percent of total losses up to the \$100 billion limit covered by the program.

After taking into account maximum limits, deductibles, and the insurers' share of payments above the deductible, CBO estimates that enacting the bill would increase direct spending by about \$7.7 billion over the full life of the program before taking into account any revenues from surcharges on policyholders. Actual spending would be spread out over many years, and most such costs would eventually be recovered through surcharges imposed on policyholders.

Taken another way, if the Secretary of the Treasury were authorized to collect premiums for the program, CBO estimates that the Secretary would need to charge, on average, about \$1.1 billion per year to fully compensate the government for the projected average annual losses due to terrorist attacks that would be covered under the bill. The bill, however, would not authorize any charges prior to a certified attack. Similarly, the bill does not contain an explicit requirement for the Secretary to recoup interest that would accrue on amounts outstanding.

**Timing of Federal Spending.** To estimate federal spending for this program on a cash basis, CBO used information from insurance experts on historical rates of payment for property and casualty claims following catastrophic events. Based on such information, CBO estimates that outlays under the bill would total about \$3.1 billion over the 2008-2012 period, an additional \$3.5 billion over the 2013-2017 period, and about \$1.1 billion after 2017. In general, following a catastrophic loss, it takes many years to complete insurance payments because of disputes over the value of covered losses by property and business owners. For this estimate, we assumed that financial assistance to insurers would be paid over several years, with most of the spending occurring within the first five years following an insurable event.

## **Revenues**

Enacting this legislation would affect federal receipts by authorizing the Secretary of the Treasury to impose taxes in the form of surcharges on policyholders to recover the amount of federal payments made under the program, with certain limitations. CBO estimates that this provision would increase revenues by about \$100 million over the 2008-2012 period and \$1.5 billion over the 2008-2017 period. Surcharges could continue for many years beyond 2017.

**Surcharges.** If a terrorist attack were to require the government to provide financial assistance, the bill would require the Secretary of the Treasury to recoup some or all of that cost through taxes paid by the insurance industry and purchasers of commercial property and casualty and group life insurance. The Secretary would be required to recover the difference between the total amount paid by the insurance industry for deductibles and the industry's share of payments over the deductible and the industry retention amount (the maximum aggregate loss to be paid by the insurance industry), which would be set at \$27.5 billion annually over the seven-year term of TRIA coverage under the bill.

The Secretary would have discretion in determining whether to recover the full amount of financial assistance provided under the program. Should the Secretary determine that amounts above the industry retention amount cannot be recovered, the Congress would be notified of that determination and provided with an analysis of the effect on taxpayers, the economy, and the burdens on small- and medium-sized businesses. For this estimate, CBO assumes that the Secretary would not seek to recover financial assistance provided above the industry retention amount and would not collect interest on outstanding amounts.

Under TRIA, the recoupment of financial assistance would be accomplished by assessing each insurer based on its portion of aggregate property and casualty premiums. Surcharges



would apply to insurance sold following a terrorist attack that necessitated federal assistance; each property and casualty insurance company's surcharge would be limited to 3 percent of its aggregate premiums. The bill would direct the Secretary to impose surcharges for as long as necessary to recover the financial assistance provided by the federal government (at least up to the industry retention amount). Thus, the government could collect surcharges for many years, depending on the amount of financial assistance. CBO estimates that surcharges resulting from a seven-year extension of TRIA would total \$6.6 billion—but that recovery would extend well past 2017.

*Timing and Tax Offset.* The bill would allow the Secretary to reduce annual charges after considering the effect on taxpayers, the economy, or burdens on small- and medium-sized businesses. Therefore, if annual losses were very high, we expect that the Secretary would limit annual collections by spreading them over many years. CBO assumes that the Secretary would not impose surcharges until two years after federal assistance is provided and that it would take more than 10 years to recover the costs of any financial assistance provided under the program. Thus, we estimate that surcharges would total \$2.0 billion over the next 10 years and that an additional \$4.6 billion would be collected after 2017.

Those gross collections would be partially offset by a loss of receipts from income and payroll taxes. Consistent with standard procedures for estimating the revenue impact of indirect business taxes, CBO reduced the gross revenue impact of the insurance surcharges by 25 percent to reflect offsetting effects on income and payroll tax receipts. On balance, CBO estimates that enacting the bill would increase revenues by a total of \$1.5 billion over the next 10 years and that an additional \$3.5 billion will be collected after 2017, net of income and payroll tax offsets.

### **Spending Subject to Appropriation**

Enacting the bill could affect potential future spending for disaster relief, which is subject to appropriation, or potential future changes in revenues. Historically, the federal government has provided assistance to disaster victims after large-scale events, generally in supplemental or regular appropriation acts (and occasionally through tax benefits). In the past, such assistance has often been provided to local governments, individuals, and businesses suffering losses.

By providing insurance coverage against damage due to terrorist attacks, the terrorism insurance program could diminish the need for federal disaster payments in future appropriation acts (as well as possible tax relief). Any potential savings from this effect, however, would depend on future discretionary spending decisions or future tax legislation, under both current law and under the bill, and thus would not be available—for scorekeeping purposes—to offset the estimated direct spending cost of extending TRIA in this legislation.

## **ESTIMATED LONG-TERM DEFICIT IMPACT**

After 2017, the legislation would decrease future deficits by about \$2.4 billion as the government recovers the financial assistance provided under TRIA through the recoupment process provided in the bill. Pursuant to section 203 of S. Con. Res. 21, the Concurrent Resolution on the Budget for Fiscal Year 2008, CBO estimates that enacting the bill would not result in a deficit increase of more than \$5 billion in any of the four 10-year periods following 2017.

## **INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT**

The bill would extend and expand mandates contained in the Terrorism Risk Insurance Act. Those mandates would:

- Require that certain insurers offer terrorism insurance, including insurance for acts of domestic terrorism;
- Require that certain insurers and their policyholders repay the federal government for the cost of assistance (in the form of assessments and surcharges); and
- Preempt state laws regulating insurance.

CBO estimates that the aggregate costs of complying with those mandates would not exceed the annual thresholds established by UMRA (\$66 million for intergovernmental mandates and \$131 million for private-sector mandates in 2007, adjusted annually for inflation).

## **Requirement to Offer Insurance**

Current law requires that through calendar year 2007, certain insurance companies offer terrorism insurance as part of a property and casualty insurance policy. The bill would extend that requirement to offer terrorism insurance through calendar year 2014. The bill would require insurers to make coverage available to property and casualty insurance policyholders for losses resulting from domestic terrorism. According to industry representatives, the direct cost for insurance companies to continue making terrorism insurance available under property and casualty insurance policies would be minimal. The bill would require only that firms offer terrorism insurance, including insurance for acts of domestic terrorism; they would set their own premium rates and policyholders could choose whether or not to purchase such insurance. Insurers who offer such terrorism insurance would receive federal payments that would help finance claims payments in the event of a certified attack that met deductible requirements.

## **Repayment of Assistance**

The bill would require the Secretary to recoup the costs of financial assistance provided to certain insurers through assessments paid by the insurance industry and surcharges paid by purchasers of commercial property and casualty insurance. This requirement to repay the federal government for financial assistance received—an exercise of the federal government’s sovereign power—would be both an intergovernmental and a private-sector mandate under UMRA because both state and local governments and private entities are providers and purchasers of insurance.

Specifically, the bill would require commercial property and casualty insurers, as well as self-insured risk pools, to pay back through assessments the financial assistance provided by the federal government. Taken individually, some insurers might benefit from the financial assistance, while others might face only the cost of the assessment. CBO cannot predict how these costs and benefits would be distributed among private and public insurers. However, for that group as a whole, the cost of the assessment would be no greater than the financial assistance received, so the net cost of this mandate would be zero.

In addition, the bill would require purchasers of commercial property and casualty insurance to repay, in the form of a surcharge, federal assistance provided to certain insurers. CBO estimates that the expected value of the surcharges on policyholders would total about \$200 million over the next five years. The surcharge would be a mandate on both private-sector purchasers and state and local governments (in their capacity as purchasers of insurance). Some purchasers would receive a direct benefit under the bill, while other purchasers would not.

## **Preemption of State Law**

The bill also would preempt some state laws that regulate insurance. Based on information from state insurance regulators, CBO estimates that the cost to states of extending those preemptions would be minimal.

## **PREVIOUS CBO ESTIMATE**

On September 6, 2007, CBO transmitted an estimate for H.R. 2761, the Terrorism Risk Insurance Reauthorization and Extension Act of 2007, as ordered reported by the House Committee on Financial Services on August 1, 2007. H.R. 2761 would extend TRIA for 15 years, require insurers to offer coverage for losses resulting from terrorist attacks using NBCR materials, and include group life insurance to the lines of insurance covered under the program. CBO estimates that enacting H.R. 2761 would increase direct spending by \$3.7 billion over the 2008-2012 period and \$10.4 billion over the 2008-2017 period. Further, CBO estimates that enacting H.R. 2761 would increase federal revenues by \$100 million over the 2008-2012 period and \$2.0 billion over the 2008-2017 period, net of income and payroll tax offsets.

## **ESTIMATE PREPARED BY:**

Federal Costs: Susan Willie

Impact on State, Local, and Tribal Governments: Elizabeth Cove

Impact on the Private Sector: Paige Piper/Bach

## **ESTIMATE APPROVED BY:**

Peter H. Fontaine

Assistant Director for Budget Analysis