Research

Terrorism Risk Insurance: A Primer

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THE POLICY PROBLEM

The issue facing insurance markets following the terrorist attacks on September 11, 2001 is succinctly described by a contrite Warren Buffet in a now famous letter to shareholders less than two months later:

> *We did not price for manmade mega-cats, and we were foolish in not doing so. In effect, we, and the rest of the industry, included coverage for terrorist acts in policies covering other risks-and received no additional premium for doing so. That was a huge mistake.[1]*

The problem for Berkshire Hathaway and other large property and casualty insurance companies is they often issue "all risks" or "open perils" policies – in contrast to "named perils" – which typically cover losses from all causes unless explicitly excluded. A common exclusion prior to 9/11 was losses stemming from acts of war though those were thought to be limited to acts explicitly carried out by sovereign countries. As a result of not explicitly excluding or otherwise addressing acts of terrorism carried out by independent actors or cells, insurers were unexpectedly left on the hook for almost $40 billion.[2]

Put another way, terrorism risk insurance was a *de facto* coverage offered to policyholders without being explicitly priced, modeled, or contractually termed. However, it was not for lack of any experience with terrorism-related events (though decidedly not of the scale of 9/11). As one expert observes: "Before 9/11, major insurance losses from terrorism were viewed as so improbable that the risk was not explicitly mentioned in standard policies (outside of transportation insurance) and hence the cost for providing such coverage to firms was never calculated."[3] A 1992 terrorist attack in London ($700 million in insured damages in 2001 dollars), the 1993 World Trade Center bombing ($725 million in losses), a series of bombings in India, and the NatWest bombing in London in 1993 ($900 million in losses) all pointed to terrorism-specific casualty risks but still remained unaddressed by policies.

With the hindsight and edification of 9/11, private reinsurers offered coverage only at very expensive rates or withdrew from the market altogether. The market for terrorism risk insurance was effectively over before it really began in earnest, and "by early 2002, insurers had excluded terrorism from their policies in 45 states."[4] Policymakers, spurred on by industry interests, worried that the ongoing lack of coverage (or coverage at prohibitively high prices) threatened to stall the construction and real estate industries via reluctance from investors and lenders.

THE POLICY RESPONSE

As a response to the dwindling availability of terrorism risk coverage, Congress passed the Terrorism Risk Insurance Act (TRIA) on November 26, 2002. TRIA is a federal reinsurance program (essentially an insurance backstop for private insurance companies) which allows insurers to share losses with the federal government in the event of a catastrophic qualifying event. TRIA has been extended since then twice, and is set to expire on December 31, 2014.

TRIA requires that insurers "make available" terrorism risk insurance for commercial customers, although customers may decline. The pricing of terrorism risk insurance is subject to state laws. TRIA imposes initial losses on insurers via a deductible.[5] Losses beyond the deductible are split, with the government paying 85 percent (and the insurer responsible for 15 percent) up to a catastrophic maximum.[6]

TRIA: HOW HAS IT WORKED?

Government reports on the program show increasing take-up rates for terrorism insurance, increases in policy limits, overall increases in availability, and decreases in premiums.[7]

These increases are due to a combination of factors, including:

- better risk management and allocation of risk capital across markets and locations;
- better risk measurement and modeling;
- increases in capacity;
- overall improvement in insurer financial conditions; and
- improvement in government anti-terrorism efforts.

Take-up rates for TRIA and non-TRIA terrorism coverage (among larger firms) have increased from 27 percent in 2003 to 62 percent in 2013. This varies across industries: 81 percent for education; 44 percent for construction. Prices have also consistently declined.

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Source: Marsh Global Analytics

Despite overall improvement in a variety of indicators since the program's inception, a few points merit considering. First, though take-up rates have increased significantly they have remained fairly flat since 2010.[8] Whether this level of coverage approaches the natural market limit for capacity (in the absence of TRIA) or whether it reflects limits of the program as structured is unclear. The program itself has been incrementally shifting exposure from the government to insurers with each reauthorization, by increasing the insurer deductible, decreasing the federal share of losses above the deductible, and increasing the size of a terrorism loss that triggers the program. In addition, the official definition of a TRIA-eligible event was expanded.[9]

Second, participation and costs varies by geography, industry, and insured size. For example, the Northeast region, larger companies, and the media sector demonstrated the highest take-up rates.[10] Thus, aggregate participation and coverage may not be that useful in predicting a post-TRIA market equilibrium.

Third, since the program was largely created out of whole cloth following the catastrophic and unanticipated events of 9/11, distance from that event without a comparable attack may lead to buildup in capital reserves, premium deflation and thus an increase in demand. As is usually the case with tail risk events, they appear nearly impossible until they're not. To put it another way, we don't know the true ex ante accuracy of insurer models (not to mention the true effect of government antiterrorism efforts) until, and perhaps not even then, another qualifying event occurs.[11]

EXPIRATION OF TRIA

Industry participant surveys indicate expiration of TRIA would affect insurers willingness to offer terrorism risk insurance: in one poll, 68 percent "confirmed they would have excluded terrorism coverage…if TRIA was not extended."[12] There is little doubt that failure to reauthorize TRIA would cause disruption in the terrorism risk insurance market, however, how much and whether this would be calamitous (e.g., eliminating available capacity) is the question facing policymakers. A 2014 survey has already pointed to increases in volatility, prices, and reduction in capacity owing to uncertainty surrounding TRIA reauthorization.[13]

No doubt elimination of TRIA would involve some increase in prices. As one report found, under TRIA, "pricing…is effectively subsidized, in part because the federal backstop does not charge insurers for the protection it offers." It goes on to conclude "the premium charged by insurers without TRIA in place is likely to be significantly higher."[14]

A recent RAND study emphasizes that post-disaster (non-insured) payouts in the absence of TRIA would necessarily be subject to political deliberations and extensive litigation.[15] Because terrorism risk models remain limited in their ability to estimate some risks, especially future and new ones, terrorism risk insurance is more widely available with TRIA than without. Moreover, such insurance contributes to community and system resilience and thus national security.[16]

Though there is little doubt that premiums would increase if TRIA is allowed to expire, these increases would be most acute in high-risk areas and metropolitan areas in general. Additionally, we would likely see an increase in self-insurance measures, though not to an extent that would match current coverages.[17]

IS THERE A MARKET FAILURE?

One author points out that the U.S. capital markets regularly experience losses larger than those resulting from 9/11 and other terrorist attacks. He points out:

> *a significant amount of net earnings of most corporations are influenced by the government's non-military policies through a vast sea of tax regulations, oversight regulations and torts…. Product and environmental liability markets have also remained vibrant despite shifting court standards…that generated large, correlated losses to insurers. Indeed,* ***shifts in legal standards are probably less predictable than many terrorist acts****.[18]*

He asserts that a terrorism risk insurance market, rather than being hampered by an inherent market failure, is hindered by a combination of "tax, accounting, and regulatory policies" which increase costs of surplus capital and prevent development of beneficial risk securitization instruments.[19] A full exploration of this argument is beyond the scope of this piece, but the author contends that a suite of deregulatory and reform measures could take the place of TRIA and sufficiently support a fully private market for terrorism risk insurance.

Even if it is correct, there is the strong likelihood that in the absence of a larger, well-capitalized reinsurance market (TRIA or not), policymakers will step in to cover some losses in the event of a terrorism attack. Post-disaster relief is a type of insurance as well, just one that tends to be unpredictable and fraught with poor incentives. In the wake of another attack, policymakers will be very unlikely to hew to time-consistent policies, instead responding to an ongoing crisis with immediately palliative measures.[20]

Again it is worth mentioning that TRIA itself creates the conditions for a mechanism that can itself be "gamed." The up-front nature of TRIA (insurers receive premiums and only pay a portion of claims) means that provision of terrorism risk insurance may be greater than desirable, although the most recent reauthorization and current proposed bills attempt to address this issue by improving the "mandatory recoupment" structure.

A POLICY PROPOSAL

There is credible, though not dispositive, evidence that failure to reauthorize TRIA would lead to significant short-term disruption in the insurance markets, with an unclear long-term picture. Since survey and market data already reflects volatility owing to uncertainty regarding the future of the program, it's safe to say the market (for better or worse) is highly dependent on the continued existence of TRIA in the short to medium term. This fact does not preclude the possibility (nor advisability) of an eventual winding down and elimination of the program over time.

Since the initial passage of TRIA in 2002, each successive reauthorization has attempted to incrementally shift exposure and cost of the program (and thus of any future losses) from the public sector to the private insurers. This has occurred along four primary mechanisms:

- insurer deductibles – from 1 percent to 20 percent;
- coinsurance – from 10 percent to 15 percent;
- program trigger – from $50 million to $100 million; and
- recoupment – varies/discretionary.

Given that take-up rates have remained fairly stable alongside concomitant moves in each these levers in the direction of increasing private market risk burden, it seems advisable to continue in that direction. If policymakers decide reauthorization is the necessary and preferred action, they should strongly consider increases in the risk/cost sharing mechanisms.

More specifically, to avoid having to revisit this issue in an ad hoc fashion, as well as providing the market with forward guidance, reauthorization should lay out gradual and predictable incremental increases for the next five to seven years. For example, the insurer deductible should increase by two percentage points per annum for the duration of the reauthorization period (the longer the reauthorization period, the higher deductibles will be at the end of the period). Similar and proportionate rates of increases could apply to the other mechanisms. As a safety valve, forthcoming increases could be delayed by an affirmative majority vote (or supermajority) of Congress – encouraging approval of delays not as a matter of course but in the face of convincing data which indicates significant market distress and reversal of previous gains.

By laying out modest but predictable increases, Congress can move toward the eventual outcome of a de minimus federal backstop and a vibrant private market without facing down the possibility of a market in revolt, forcing an even more heavy-handed federal role.

[1] Warren Buffet, “Letter to Shareholders of Berkshire Hathaway,” November 9, 2001, http://berkshirehathaway.com/qtrly/web1101.html