Comments on Kent Smetters Paper

“Public Policy Issues Confronting the Insurance Industry”

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Kent said that he was not going to be provocative. I disagree. I think he was very provocative. I think he raised a lot of interesting issues, many of which I agree with. However, I want to bring other perspectives to the table.

I am sure that Kent Smetters must be delighted to be unfettered, having been at Treasury while the discussion on terrorism insurance was going on. He is now able to make a number of points that he perhaps would have liked to have articulated at an earlier stage of the process. He also has the insight that very few people have on this topic because he was at Treasury when alternative policies were being discussed. He had an opportunity to really understand the dynamics of the process, which has led him to form a set of very strong opinions.

I want to start off by saying that it would be nice to remake the world and have institutions function the way we would like them to operate. However, it may be very difficult to achieve that in practice. A lot of the things that Kent is favoring, I also support --regulatory reform and accounting reform. I am not an expert on the tax reform issues, so I don't want to comment on these. Institutional reforms would certainly improve the situation and make life a lot easier for dealing with some of these catastrophic risks. However, there are reasons why certain measures may be hard to implement in the way that Kent would like to see.

Behavioral Factors Impacting on Institutional Reforms

In this spirit I would like to suggest some behavioral factors that impede institutions from changing. They pose some challenges in dealing with events like terrorism and other catastrophic risks.

Two principal points that Kent makes in his comprehensive paper are:

(1) The private sector should deal with terrorism protection because we do **not** have incomplete markets

(2) There are **no** externalities that require the involvement of the public sector.

I want to suggest that we do have incomplete markets and externalities because of the behavior of those at risk as well as those providing protection against risk.

One factor leading to a relatively thin market for terrorism coverage is ***misperception of the risks*** by both buyers and sellers. I'll illustrate this point in a moment when we look at the terrorism insurance market both pre- and post-September 11. Individuals don't do a very good job of perceiving the risk.

Related to this point is the ***use of very simple decision rules*** in dealing with low probability-high consequence events. We don't want to open up too many Pandora's box of horrors. In the context of risks, if the probability of a disaster is perceived to be sufficiently small, both consumers and insurers will say "It's not going to happen to me so let's not worry about the potential consequences of such an event."

I want to argue that the reasons why insurers behaved the way they did prior to September 11 was different what Kent suggested. They were **not** thinking of terrorism as an Act of War. Rather they were not thinking of the consequences of a terrorist act on their insurance claims.

The second aspect was brought up by Henry Aaron in a comment that he made this morning and that is a concern by insurers with safety first. When experienced losses are too large, insurers get worried and want to do something about preventing them from occurring again. They want to take action to reduce the chances of insolvency so it is at an acceptably low level. Businesses and consumers at risk are also willing to pay large premiums for insurance after they experience a catastrophic loss or learn about the fate of others in this regard for the same reason as insurers are concerned with offering coverage---they want to protect themselves against suffering a large loss from another terrorist attack.

Are There Incomplete Markets for Terrorism Coverage

So let's take a look at a complementary scenario to the one that Kent constructed in his paper that utilizes the above behavioral concepts. Prior to September 11, insurers offered terrorism as an unnamed peril on their commercial policies. Now, one way to view this decision is that insurers actually thought terrorism was going to be viewed as an Act of War.

I don't believe that that was the case. Rather terrorism was never really considered by insurers to be a peril worth worrying about. Prior to September 11th insurers felt because the likelihood of a large loss was considered to be sufficiently low that it was not worth the time and costs of estimating the risk and setting an explicit premium to reflect this. The risk was very ambiguous, no question about that, but insurers weren't worried about the consequences from a terrorist attack because they thought the probability of a catastrophic loss was below their threshold level of concern.

Insurers thus ignored past events when making their decision not to exclude terrorism as part of their standard commercial property coverage. The World Trade Center bombing in 1993 certainly should have been a signal that the insurers had something to worry about. One view is that they just said, that the consequences weren't that bad and wouldn't change in the future. So we don't have to be concerned about terrorism when we price future policies.

To my knowledge, there was not a single insurer who constructed a scenario of the World Trade Center collapsing after being attacked by terrorists. Although we have heard anecdotal evidence that in 1993 had the terrorists had a larger bomb the consequences could have been much worse.

Insured businesses were covered against terrorism, but these firms may not have known that they were protected until after the attacks of September 11 because it was an unnamed peril. They obviously then wanted to collect on their policies, and they did. So the private insurance market functioned very well.

Now let's turn to the perception of the terrorism risk immediately after September 11. Now both parties, businesses and insurers, focused on the ambiguity associated with the probability of another attack and on the resulting losses. After Septemer 11th terrorism became a named peril because the probability of another event was perceived to be greater than the threshold level of concern and it the potential of causing a large loss of surplus perhaps leadig to insolvency.

Businesses in large cities actually said, "We are willing to pay a lot for this coverage". But they couldn't get a policy except at very high premiums because the reinsurers withdrew their coverage having suffered large losses from September 11th. There was thus a very thin market for terrorism coverage because the willingness to pay for those demanding insurance was less than the premiums most insurers were willing to charge.

Now, let's take a look at terrorism today. As Kent indicated, TRIA was passed in November 2002 and insurers are now forced to supply coverage. The premiums are higher than insurers' estimates of "expected loss" due to ambiguity aversion. They have certainly come down from September 11th as Kent noted. However, the insurers do not actively want to market terrorist coverage. I think they feel it is something they have to provide; otherwise they may lose some of their other business. Most businesses don't want coverage today because they believe, "It's not going to happen to me."

So you could say the market is functioning but in a rather strange way. Only 36 percent of firms in New York City have bought coverage as of October 2003, and a much smaller proportion have purchased it in other parts of the country. There are reasons for that. One of them could be ***high premiums.*** The premiums are still relatively high--20 percent of property casualty premiums for large firms and a bit less for the smaller firms. There may be a ***credit risk.*** There may be a feeling that coverage is limited---the insured are not protected against domestic terrorism. And there are some behavioral biases that would also play a role, like "It may not happen to me."

Role of Externalities

Now let's talk about externalities. In my view there are externalities that need to be taken into account when we ask ourselves whether or not government should play any role. The first has to do with "the Samaritan's dilemma" that Kent referred to and that Steve Coates as well as others have written about. People may not purchase coverage because of an expectation of government aid following the next disaster.

What will happen after the next terrorist attack? We do know from past experience that after a disaster there is a clamor for relief. We know after September 11, the airlines received significant federal assistance due to their financial problems. So we have to ask the question as to how government aid fits into the picture and whether it is appropriate for the general taxpayer to bear these costs.

There are also negative externalities caused by problems of interdependent security, an issue that Nat Keohane Richard Zeckhauser, Geoffrey Heal and I have been studying since September 11. By interdependent security we mean the possibility that one agent may contaminate others by failing to invest in protective measures. Insurers cannot encourage their clients to invest in risk-reducing measures by giving them large premium discounts because they recognize that even if they take these steps, unprotected firms may negatively impact their clients. An airline that invests in baggage security measures could still have a dangerous bag transferred from another unsecured airline.

Another behavioral characteristic of individuals and firms, which may lead to underinvestment in protection is ***myopia***. If individuals and firms have short-term planning horizons they are not willing to incur the upfront costs of investment since they underestimate the potential benefits that can accrue from this action.

Three Terrorism Insurance Scenarios

Two scenarios can now be compared. **Scenario 1** is Kent's scenario—a voluntary insurance market. **Scenario 2** is some type of required terrorist insurance. **Scenario 3** relies on both the private and public sectors to provide protection.

In Scenario 1 insurance and reinsurance would cover the first layer of losses, some type of capital market instrument such as a catastrophe (CAT) bond to cover the higher losses. And you wouldn't have to have government involved at all.

There are reasons why the capital markets have not provided funds in form of a terrorist CAT bond. A principal reason is lack of investors' interest due to the ambiguity of the risk. Investors want higher returns when there is ambiguity, and we certainly know that for terrorism, there is a lot of ambiguity. A second reason has to do with the reputation of investors. If they market a CAT bond and there is a loss, they may fear that their reputation with clients will be somewhat tarnished.

A third reason for the lack of interest in terrorist CAT bonds is one that I heard from Jim Ament of State Farm. After September 11 investors concluded that if the reinsurers weren't providing protection, why should they enter the market? Reinsurers were perceived to be the experts in this arena and so investors followed their lead. Finally, the terrorism models developed by the three leading modeling firms and others are still new and untested. Hence one needs to be uneasy about their predictive capability.

What happens after the next terrorist attack if voluntary insurance were in place? I would predict that many insurers and reinsures are going to fold up their tents at least temporarily, just as they did after September 11. The government is going to provide relief to the uninsured, and there is going to be ad hoc legislation that will be passed, assuming TRIA will have expired and there was no formal public sector involvement in place.

Scenario 2 is required terrorist insurance. Private sector institutions, such as banks and financial institutions, could require terrorist insurance coverage as a way of protecting their investments. This type of requirement would be in keeping with the current practice of requiring property insurance as a condition for a mortgage. Alternatively one could have the federal government require that all firms and homeowners take out terrorism insurance, as the French do today.

What happens after the next terrorist attack? There will be limited government relief since most businesses and homeowners will be protected. The insurers may want to raise their rates if they suffer a large loss relative to their incoming premiums. To the extent that an insurer has a highly diversified portfolio of risks, then it would be more unlikely to be in financial straits after an incident than if all its eggs were in one urban area.

Scenario 3 is a public-private partnership where insurers and reinsurers handle the first level of losses. If the capital markets are not willing to jump into the fray, then the Federal Government will have to provide coverage against catastrophic losses through some type of federal reinsurance program. Due to negative externalities caused by interdependencies, the government may also impose regulations and standards to reduce the risk of losses from future terrorist attacks.

Learning from Natural Hazards Insurance

There is much to be learned from experiences with natural disaster insurance in this country as to whether insurance should be voluntary or required and the appropriate roles that the public sector can play in supplementing the private market.

Flood insurance provides one instructive example. One company, inspired by the overflowing of these two rivers in 1895 and 1896, offered coverage to homes along the Mississippi and Missouri Rivers in 1897. Two floods in 1899 caused severe losses with the home office being washed away in the second flood. After that date no insurance company offered coverage again until the mid 1920s. Severe floods in 1927 and 1928 led all companies to discontinue offering coverage. The National Flood Insurance Program, a public-private partnership, was passed in 1968 and linked flood plain regulations with insurance protection at subisidized rates for existing properties at risk. Few people voluntarily purchased coverage, leading the federal government to require its purchase as a condition for a federally-insured mortgage.

Turning to ***earthquake insurance***, which Kent discussed in his paper, the history of the industry in this domain has been somewhat spotty. Earthquake coverage has been marketed by the private sector from 1916 until the Northridge earthquake which caused over $14 billion in insured damage. Insurers indicated that they could not afford to continue to write this coverage.

As a result the California Earthquake Authority (CEA) emerged as a public sector agency providing coverage to all homeowners in the State who would like insurance. It is not at all clear what will happen after a major earthquake, but as we heard this morning, few people buy earthquake insurance today because of the very high deductibles on the CEA policy.

A third hazard worth looking at is ***hurricanes***. After the $16 billion losses suffered by insurers from Hurricane Andrew in 1992, insurers threatened to withdraw their homeowners' coverage in Florida. The only reason they continued to provide insurance was that they were forced to do so by the State, and a catastrophic fund was created in Florida to provide insurers with protection against large losses in their surplus.

For all of these hazards the government has played an important role at the national and state levels because of the catastrophic loss potential from floods, earthquakes and hurricanes. Terrorism presents even more serious problems as demonstrated by the losses from September 11th.

Concluding Comments

To conclude, here are three questions for future research stimulated by Kent's paper.

(1) What kind of public-private arrangement would be useful for collecting and pooling past data to assess future risk data? There is a useful role for government to play in this regard and I believe Kent would be sympathetic to this arrangement as well.

(2) With terrorism, you have a challenging issue of privacy and what information to release given the concern with compromising national security. How do we deal with that question?

(3) What is the impact of public sector initiatives on the performance of the private insurance market. I am sympathetic to having the public sector supplement insurance but not take it over.

(4) Finally, there are a set of distributional and equity issues as to who should pay for terrorism. If there is consensus that all taxpayers should pay for terrorism in some way, then we do have a potential role of the government in developing ways of sharing the pie.