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May 11, 2020

Hon. Maxine Waters, Chairperson
House Committee on Financial Services
U.S. House of Representatives

Hon. Patrick McHenry, Ranking Member
House Committee on Financial Services
U.S. House of Representatives

Dear Representatives Waters and McHenry:

As discussions continue around efforts to create a pandemic risk reinsurance program in the wake of COVID-19, I write on behalf of the Casualty Practice Council of the American Academy of Actuaries¹ to share our thoughts on certain aspects of the Pandemic Risk Insurance Act Discussion Draft. As actuaries, we estimate the cost of insurance policies. The difficulty of pricing business interruption (BI) insurance including pandemics both in general and under the wording of the Discussion Draft is the focus of this letter.

The intent of the legislation, as we understand it, is to enable the commercial insurance market to include pandemic virus as one of the hazards covered by standard BI insurance policies. Currently, this hazard is excluded from almost all BI insurance contracts.

What makes insuring a pandemic different

Pandemics are excluded currently because they, by definition, impact a large number of people over an extended continuous period of time. Generally, property/casualty insurance works by pooling risk that takes limited and randomly occurring events (fires, automobile accidents, windstorms) and distributes the associated expected costs over a large pool of policyholders. This risk distribution is facilitated by the reinsurance market, which pools the risk over the global financial markets. When an event is potentially very widespread, perhaps affecting millions of policyholders for a continuous extended period on a global basis, then the model of distributing costs over the larger pool does not work well.

¹ The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

What makes insuring a pandemic complicated

The commercial insurance model does not work well for events like a pandemic when the potential cost is large with no clear maximum and occurs very infrequently. The reasons include the following:

- The expected cost is difficult to determine. Insurers' modeling techniques include significant uncertainty in the estimation of the frequency or severity of potential pandemic-related losses.
- The estimated costs for adding coverage of pandemic risk to BI policies could outstrip the annual premium for all other aspects of the insured risk, thereby reducing the affordability of the primary coverage.
- Commercial reasons make it impractical for insurers to charge a high, unaffordable premium and to set aside sufficiently large amounts of capital and assets to support the exposure.
- Pandemic losses are correlated with declines in the value of assets. As a result of the economic shocks that accompany a pandemic event, the value of the assets set aside to pay the claims could be impaired as part of the event. (Such correlation is illustrated by thinking about why it is not wise to write fire insurance on a building where the insurer has a mortgage investment. In the event of a fire, the insurer would have to pay out a claim at the same time that the value of its assets declined.)
- Geographic risk diversification, as already mentioned, is not possible due to the global nature of the event.

Existing government insurance programs may provide insights for a new program

In some cases where the insurance market has been unable or unwilling to provide very large amounts of coverage for certain risks that are hard to estimate or might never have occurred before, the federal government has established programs to facilitate insuring against perils such as terrorist attack or nuclear power plant meltdown. In the case of the Terrorism Risk Insurance Act (TRIA), a limit was set on the maximum financial risk the insurance industry is expected to take and then provided a plan for the federal government to step in if it becomes necessary to fund payment of claims above that limit. The different programs have varying designs for how the government would be reimbursed after the event.

In the case of flood insurance, the National Flood Insurance Program (NFIP) is the primary insurer (selling policies directly to homeowners and small businesses) and the U.S. Treasury steps in to back the program with "loans" when massive storms cause insured losses to exceed the funds that the NFIP has on hand, as the NFIP has no cap on the amount covered. These loans are intended to be repaid after the event by surcharges added to insurance policies for future coverage, although Congress has sometimes directed that certain loan amounts be forgiven.

None of these federal programs follow the private sector's insurance rules of determining exposure, spreading the potential cost out over all insureds, and then collecting sufficient funds and maintaining sufficient assets to pay all claims when they arise. These federal programs help the insurance market by putting a cap on how much risk the marketplace is expected to handle and then providing a federal backstop for the rare and unpredictable event that exceeds that cap.

Summary of the proposed plan

In the Discussion Draft of the Pandemic Risk Reinsurance Program, we see a different approach. In the legislative draft that we have seen circulated, it appears as if the Treasury Department

would act as a reinsurer with a cap on its exposure, selling coverage to primary insurers that add pandemic to the list of risks that are covered in their BI insurance policies. The draft language generally is silent about how this would work, leaving it up to the secretary of the Treasury to report back with a plan. The draft directs that “the Secretary shall charge the insurer a premium for reinsurance coverage ... based on the actuarial cost of providing such reinsurance coverage.”

The actuarial issues

Using the term “actuarial cost” implies a degree of certainty about the risk and the ability to estimate the expected cost of future pandemics. However, there is no basis for calculating either the frequency of future pandemics or the likely cost of BI losses due to future pandemics. Even if there were, it is impractical for insurers to set aside dedicated financial resources to pay those massive claims, which could be decades in the future. Such dedicated funds would not be deductible as an expense for tax purposes, but instead would be part of insurers’ retained earnings.

We note the hundreds of billions of dollars that Congress has so far appropriated in order to assist businesses that have suffered financial losses during the current coronavirus pandemic. Any expectation that the property and casualty insurance industry will be prepared to step in and assume much of this responsibility in the next pandemic must come with an appreciation for the added costs that would be built into future insurance rates.

Loading the estimated full cost of pre-funding payment of claims for business interruption in the next pandemic event—including the proposed new Pandemic Risk Reinsurance Program—onto the BI insurance contract would grossly distort the cost of that product and make it impractical for consumers. We do not think this is your intent, so we recommend revising the draft language.

Components of a solution

In order to foster coverage of pandemic risk in future BI insurance policies, a good approach is to follow the pattern of other successful federal programs that place the more predictable portion of the financing of the program in the pre-event period while the less predictable portion of the financing is placed in the post-event period. A new program modeled after existing federal programs would do the following:

- Cap the amount of financial risk the insurance industry (both primary insurers and reinsurers) is expected to absorb;
- Create a mechanism for the U.S. Department of the Treasury to provide temporary unlimited funding if claims exceed that cap; and
- Provide a plan for the Treasury potentially to be reimbursed after the event.

In summary, the design of a new program needs to consider the issues described at various places in this letter including:

- Uncertainty of frequency and severity of future pandemic events;
- Need for insurance industry limit and a federal backstop;
- Consideration of the methodology for distributing funds quickly but with consideration of the unknown total cost of the event while in the midst of it;
- Fair reimbursement of funds to insurers while in the middle of the pandemic;
- Limitations on the insurance industry’s ability to hold collected funds in reserve;
- Risk to value of assets held in reserve due to correlation of pandemic risk with market risk; and

- Need to balance affordability of coverage with potential benefits of the program.

An additional concern

While the preceding discussion focuses on the actuarial and financial aspects of covering pandemic-related BI exposure, we also note that there is some question around whether the property and casualty insurance industry would have the operational capacity to handle the vast numbers of claims that would flow out of this expanded coverage. Insurance companies respond to local or regional catastrophes (hurricanes, tornados, earthquakes, etc.) by redeploying personnel and assets from unaffected parts of the country for short periods of time. The widespread and long-term nature of a pandemic event means that there might not be unaffected parts of the country and the current insurance industry model for catastrophe response would not apply.

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The Academy's Casualty Practice Council has worked in the past to help the Congress and others to understand flood insurance, terrorism risk, and other property and casualty insurance issues. We look forward to working with you and your staff as you address the challenge of providing business interruption insurance coverage in the event of the next pandemic event.

We can be reached by contacting Marc Rosenberg, senior policy analyst at the American Academy of Actuaries, at rosenberg@actuary.org or 202-785-7865.

Sincerely,

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American Academy of Actuaries

Cc: Members of the House Committee on Financial Services and the
Senate Committee on Banking, Housing and Urban Affairs