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POTENTIAL ROLE FOR GOVERNMENT IN TERRORISM INSURANCE COVERAGE

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Powerpoint presentation

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Potential Role for Government in Terrorism Insurance Coverage

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The Initial Decision to Intervene

- Initial intervention usually follows terrorist attack, after private insurers withdraw from the market. The government has little choice but to intervene:

1) Committing government resources is credible demonstration that attacks will be controlled.
2) Response falls under French "national solidarity" principle. Attack on economic/political system needs greater response than even natural disasters.
3) Government intervention will moderate, if not eliminate, possible impact on macroeconomy.
4) Were further attack to occur soon, there would be serious regret and costs not to have intervened.

Government Intervention: A Contrary View, Priest [1996]

- Priest [1996] argues that government intervention in insurance markets is rarely warranted:
  - Private market insurance is always *voluntary*, while government insurance is frequently *compulsory*. Low-risk individuals might prefer not to participate.
  - Government insurance plans are often just disguised policies to *redistribute resources*.
  - Government insurance is intrinsically *less efficient* than their private market counterparts.
- While these point are often true, in my view they have limited applicability to terrorism insurance.

Government Intervention: A Contrary View, Smetters [2003]

- Smetters [2003] argues that US intervention in terrorism insurance (TRIA) was not warranted.
  - Private market failure due in good part to government (tax, accounting, regulatory);
  - Private firms have knowledge/skill to evaluate terrorism coverage (pricing is possible; use ex-post premiums).
  - Low take-up rates for private terrorism insurance during 2002 could just reflect low demand.
  - Private market in US failed much less badly than commonly thought (at least by time of TRIA, Fall 2002);
- I agree with these points as relevant for renewal. But after major event, government must intervene.

The Basis of the Failure of Private Markets for Terrorism Insurance

- Fundamental factor is the difficulty to obtain/hold block of capital sufficient to cover maximum loss.
  - Insurance managers are generally not willing to risk their firm or jobs. (Warren Buffett/others are exceptions).
  - Accounting, tax, regulatory frictions make earmarking capital difficult for all catastrophe terrorism losses (US).
  - Capital markets reluctant to provide risk capital when the risk is unclear. Ambiguity aversion extenuates issue after major event (even with high expected profits).
- Solutions:
  - Improve private markets by expanding capital access;
  - Direct government intervention.

Government Actions to Expand Capital Access

- Government regulations inhibit current access of catastrophe insurance firms to capital markets:
  - Accounting Requirements: US GAAP rules preclude insurance firms from *earmarking* capital for future losses. Firms may still retain earnings, but they face takeovers.
  - Tax Provisions: Casualty firms in the US may not take tax deductions for reserves created against future losses;
  - Capital market instruments: Exchange-traded cat options failed. Cat bonds provide more potential (see next slide).
- Government can improve cat insurance access to capital markets. But changes unlikely to have enough near-term impact to reactivate private markets in terrorism risk.

Catastrophe Bonds as Conduit for Capital Market Access for Terrorism Insurance

- Catastrophe bonds face variety of regulatory, tax, and accounting issues that inhibit their usefulness.
  - Tax treatment of cat bonds (less favorable than for US mortgage securitizations) and such issues as whether cat bond sales count as "true sale".
  - Solutions are in process, but unlikely such changes will create major near-term capital market access.
- Fundamental issue of pricing; bonds should be attractive if "zero-beta" macroeconomy correlation. But if that is not true, then investors may require substantial risk-premium.

Private Market Mutual Risk Retention Pools

- Mutual risk pools may involve insurance users or firms.
- US firms just considered a mutual pool to cover workers' compensation risks that arise from terrorism events.
  - Workers' comp terrorism coverage is required in US.
  - Firms engaged Tillinghast/Towers Perrin to study if industry pool could carry these workers' comp risks.
  - Conclusion was that such a pool was not practical primarily because it did not create new capital.
- Noteworthy that government interventions also create a mutual pool as coinsurance component, but these are all backstopped with government capital resources.

Direct Government Intervention: Government as Reinsurer of Last Resort

- France (GAREAT), Germany (Extremus), the UK (Pool Re), and the US (the Terrorism Risk Insurance Act, TRIA) all have plan in which government serves as reinsurer of last resort:
- The plans all have a mandatory *deductible limit* at lowest risk level, coinsurance at middle risk level, and full coverage at highest tier. The plans differ in other aspects:
  - *Mandatory participation*: Mandatory rules control adverse selection, but may crowd out private markets.
  - *Explicit reinsurance pool:* Builds-in risk mutualization, but may crowd out private market.
  - *Maximum Private Retained Risks*: Greater government transfer implies greater support for terrorism insurance, but threatens to crowd out private activity.

Government as Reinsurer of Last Resort: Plan Features (continued)

- *Pricing of government reinsurance*: Most countries set fee, but US is free. Few countries use risk-based pricing.
- *Pricing of primary insurance premiums:* In most countries, the primary insurers control retail prices. It is important they use risk-based pricing to create incentives for mitigation.
- *Risk coverage limitations*: Countries vary in coverage of CBNR risks, in source of attack, and in insurance lines that are covered.
- *Sunset provisions*: Most countries have date for termination, which is useful, though we will soon see the dynamics of the renewal process.

Why is Demand So Limited

- A common feature across many countries is the "take-up" rate for terrorism coverage is quite low.
- Explanations:
  - Probably not coverage limits, since that should increase demand for the coverage that is available.
  - Public firms share risk among shareholders.
  - Behavioral factors may limit demand.
  - The price may just be too high. We observe increasing take-up rates as the prices decline, so this may be the key factor.

Drawbacks to Government Intervention: Crowding Out Private Terrorism Insurance

- Existing government plans have tiers of coverage:
  - Deductible puts risk on firms: no crowding out.
  - Coinsurance puts most risk on firms: little crowding out.
  - Top tier has full government coverage: crowding out (but would private firms offer coverage?)
- Dynamic pattern as expected losses decline (assuming no further major attacks):
  - Government plan should *not* lower premiums.
  - Government plan could raise attachment points.

Drawbacks to Government Intervention: Limiting Private Sector Mitigation

- Three basic forces regarding mitigation:
  - Insurance reduces incentive to mitigate, since insured individuals will receive indemnification for losses.
  - Ex post emergency relief by government also decreases incentive to mitigate expected losses.
  - Risk-based premiums, however, provide an incentive to mitigate, which at least offsets the negative incentive created by the availability of insurance.
- The failure to apply risk-based premiums in most government reinsurance programs creates an incentive against mitigation.

Alternative Formats: Lender of Last Resort

- Lender of last resort provides liquidity to insurance firms following catastrophic event, but loans must be repaid:
  - Similar to "insurance" that requires "ex-post" adjustment of premiums to cover previous losses.
  - Most current government plans have ex-post option.
  - Unclear if ex-post premium would actually be applied.
- Limits government cost as long as the arrangement is successful in reviving terrorism insurance.
  - Works if insurance market failure is problem of short-term capital market access, but
  - Fails if terrorism insurance viewed as *negative present value project*, requiring access to government reinsurer.

Alternative Formats: Auction Mechanisms

- The existing plans all set an administrative price for the government reinsurance.
- An auction mechanism will set the price competitively, reflecting the true demand.
- Catastrophe bonds provide an attractive vehicle for "what" is auctioned. Also may help create markets for catastrophe bonds.
- Devil is in the details, especially difficult to enact immediately following terrorist attack.

Renewal Options

- The plans in most countries will soon face renewal.
- Assuming a country faces <u>no new major attack</u>, the options available upon renewal are quite broad:
  - It is worthwhile reviewing the fundamental benefits of terrorism insurance to ensure they warrant the costs.
  - Given no new attacks, the expectation of future attacks should fall. This allows the government to change the parameters of its involvement, raising deductibles, coinsurance, and attachment points, as well as prices.
  - By following a "path to sunset", the government helps revive private markets and incentives for mitigation.