

Present: Mike Cooper - CGU Group

David Crichton - Independent Consultant

Shirin Elahi - Surrey University
Simon Jennings - Benfield Greig

Joanne Linnerooth-Bayer - IIASA

Ragnar Lofstedt - Surrey University

Simon Quijano - IIASA

David Simmons - Benfield Greig

Actions:

1. MC, DC, SJ ad DS to provide comments on the eight case studies submitted at the meeting, by 1 November; DC will shortly be away on business and may submit his comments later.

- 2. MC to send a reference on "Turkish research" to JLB.
- 3. The next meeting of the project team to be arranged for early December (Monday, 6 December), at which two potential products will be developed and tested against the data emerging from the case studies.
- 4. JO to establish a secure area on TSUNAMI's Web Site, to store documents relating to the research project and to investigate the possibility of establishing a discussion group.
- 5. SE, JLB, RL and SQ to finalise the eight case studies by 3 December.
- 6. MC, DC, SJ and DS to suggest possible options available to influence insurance policyholders in reducing risk.



Notes:

CASE STUDIES

- JLB presented a summary of the results in the case studies, highlighting the stable ratio (around 50%) of total estimated relief from private and public sources against the total estimated loss.
- Of all the studies, the Polish 1997 Flood Study was best populated and showed a particularly large contribution from the World Bank and the Polish Government.
- The two largest estimated total losses were for the Kobe Earthquake at \$115Bn and for the Northridge Earthquake at \$40Bn. The discussion of the emergence of these figures showed that this varied between different environments and was often influenced by political considerations.
- SJ suggested that the case studies should include a comparison, for different perils and geographical regions, to demonstrate variations in the penetration of insurance. These comparisons should be made against a number of different measures/criteria.
- SQ commented that in the period from 1993 to 1995, the comparative response in Poland to flooding showed how quickly policy could react.

POLICY ISSUES - CURRENT PRACTICE

- US Earthquake cover was compulsory through the Californian Earthquake Authority, whose "mini policy" provided a fixed percentage of the value of a building and its contents, and provided four covers, for the building, contents, alternative accommodation and other structures (e.g. garage and outhouses).
- Two generic forms of participation in the US market were possible, one which guaranteed cover for insureds suffering default against a state run pool and the other "Excess Surplus" lines, which was not overseen by the authorities and was not guaranteed.

POLICY ISSUES - TRENDS

• The US case studies highlighted that FIMA was under pressure to reduce costs and the level of aid provided after flooding events. The political nature of insurance policy was further enhanced by the role of insurance commissioners.



POLICY ISSUES - MITIGATION MEASURES

- Some examples of positive mitigation measures were observed, including the example of a Northridge area hospital that had survived intact, mainly due to structural strengthening and seismic isolation work. This enhancement had been carried out at a cost of only 2% of value. Gas isolation valves had also proved their value in the Kobe area.
- A discussion of different risk control measures highlighted the "Californian Insurance Rating Manual", which set out a number of means that could be used to influence the behaviour of insureds.
- Other mitigation measures discussed included declinature, averaging, and product terms such as policy limits and deductibles.

RESEARCH PROJECT DEVELOPMENT

- SE observed that a number of outstanding issues in the research needed to be dealt with and further additional sources could provide this. However, as observed by the US Academy, there were many dangers in comparing figures obtained from different sources.
- With this is mind, it was agreed that the research should now look to move on to consider how the case studies might be used in developing new products. SJ now saw the major challenge as being to create a suitable product and pricing it.
- DS observed that Business Interruption and Consequential Loss offered a number of potential business opportunities.
- DS also commented that it was essential that, to influence public policy, the industrial representatives should understand how to engage government. This was particularly pressing as many governments were looking to pull out of disaster protection to reduce the public burden.
- MJ observed that the convergence of insurance markets would take time and that
 opportunities would continue to exist in different markets. As observed earlier,
 pricing and promotion of new products would be essential to success. MJ also
 suggested that a suitable balance would have to be struck between the private and
 public sectors.
- JLB said that data on the risks borne by the insurers was essential, so that diversification benefits could be achieved. JLB also observed that the World Bank had offered to fund the development of an insurance industry in Poland and this request may be of interest to TSUNAMI.



- DC reminded the team of his "BASIC MUD" mnemonic, to guide the design of a new product. Also, any development needed to be prospective and proactive in its implementation.
- DC saw a number of potential roles for the insurance industry:
 - Disaster Management Service.
 - Influencing Policy in Governments and Banks in dealing with risks.
 - International data gathering.
 - Supporting the Resilience of Wealth, particularly against climate change.
 - Influencing International Building Standards.
 - Influencing the Committee for Earth Observation.
 - Supporting the UNEP Initiative.
 - Improving the interaction between banking, insurance and relief agencies.
- SJ commented that success would not just be related to the creation and sale of insurance products but to revenue operations, such as modelling, data collection and broking.
- JLB suggested that further data could be made available from the National Academy of Sciences.
- SE asking for a list of mitigation measures from the industry representatives.
- There was general agreement that DC should be invited to remain on the project as an independent participant.