



## **Assessment of Earthquake Loss Distribution Between Public and Private Risk Takers**

Milan Simic and John E. Alarcon

AIR Worldwide, London, United Kingdom (msimic@air-worldwide.com)

Natural disasters may induce a severe economic impact for governments, possibly as high as double-digit percentage of the GDP. One of the earliest forms of government/public intervention in disaster loss mitigation was the formation of government-sponsored pools. Following the creation of New Zealand's EQC in 1945, a number of similar government-sponsored public bodies involved in disaster loss mitigation have been established. Such bodies include Taiwan's TREIF, Turkey's TCIP and most recently Romania's PAID. This paper briefly reviews AIR's catastrophe models for all the listed countries and compares and contrasts the different schemes created from the coverage and loss payout point of view. The majority of the paper is devoted to the assessment of the split of the overall (ground-up) loss potential into various components: private policyholders, government-sponsored pools and private participants from the insurance/reinsurance industry. This assessment enables meaningful quantitative comparisons of various pools' coverages and protection offered in each case.