

Panel discussion: Alexander Allmann

In a worst case earthquake scenario losses could reach as high as US\$ 2000bn. Although the world economy might possibly be shaken by such an event, the extent and timeframe of an impact remains speculative.

Drastic consequences in some sectors of the economy as a result of less dramatic events seem to be more probable. The 921 Chi-Chi earthquake highlighted the vulnerability and interdependence of modern, networked, high-tech society. Although located outside the epicentral area, production in the semiconductor plants was disrupted for several weeks mainly due to power failure and a shortage of specific damaged parts. A few high-tech stocks fell immediately after the earthquake because a shortage of computer memory chips was expected. This event shows that the consequences of earthquakes cannot be considered local anymore. Just-in-time supply, the use of only a few suppliers and global interdependence can lead to business interruption in all sectors that rely heavily on these means far beyond the earthquake region. The 921 earthquake should be seen only as a warning. An earthquake located closer to the industrial area of Hsinchu that caused serious structural damage to production facilities would have an impact of quite different dimensions.

In a worst case scenario of global dimensions the insurance sector could be severely affected. Today the insurance industry could withstand even a worst case scenario but would react with a sharp increase in premiums. Local insurance companies and small reinsurers could go bankrupt, whereas the big players would not be endangered. The greatest burden would usually rest on the shoulders of the uninsured people. Because of the huge amounts needed for reconstruction, the government could not step in to relieve this burden adequately. A major increase in insurance penetration supported by a transfer of risk to the capital markets could change this situation. In the event of a natural catastrophe the investors could leave the field of securing this kind of risk from one day to the next. A greater utilization of ART could cause a sudden drop in the capacity available on the world markets. Another possible scenario that could have supraregional consequences is the catastrophic failure of a nuclear power plant or huge chemical plant polluting immense areas. Although the industry claims a near-zero probability of this happening, such an event cannot be ruled out completely. Severe earthquakes have repeatedly taught us surprising lessons. It is not possible to anticipate the behaviour of such critical facilities in extreme events beyond any doubt.