

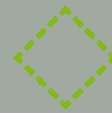
Social Vulnerability

Summer Academy 2007

Megacities as Hotspots of Risk



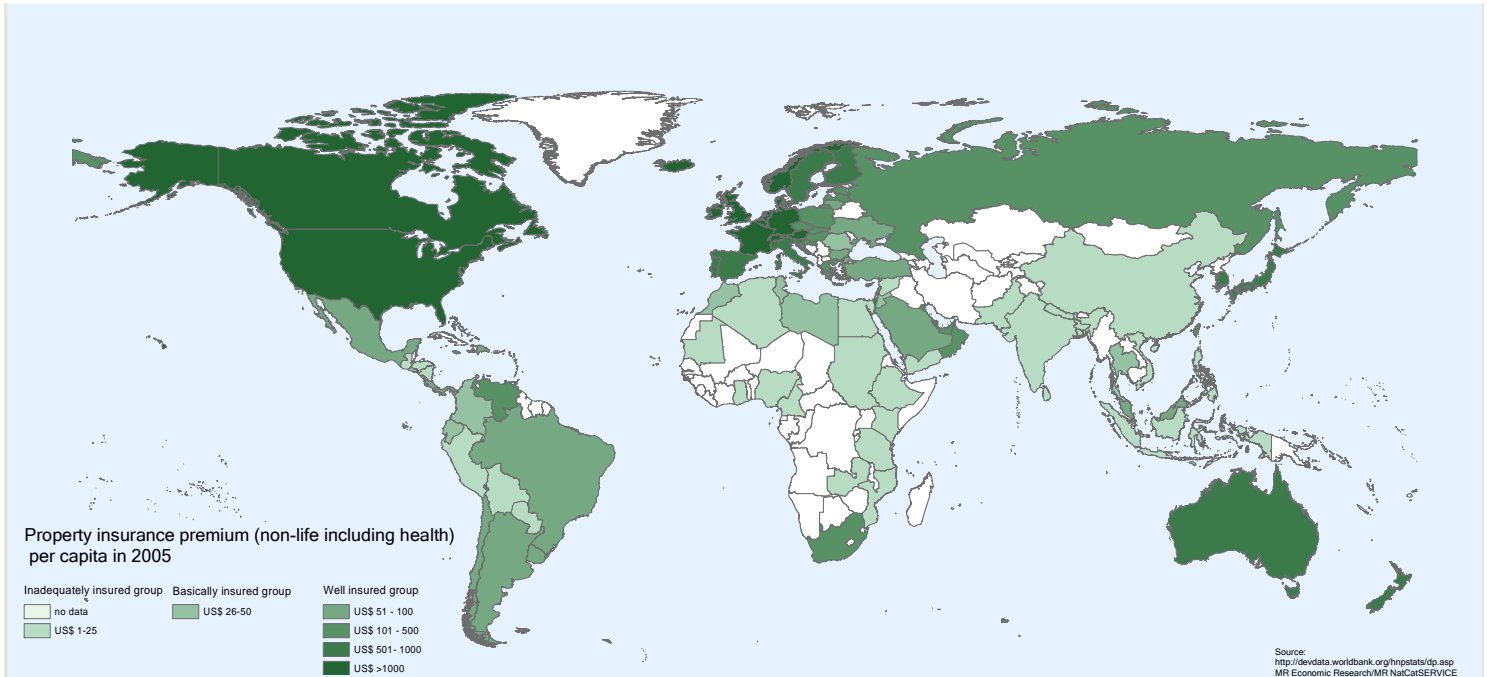
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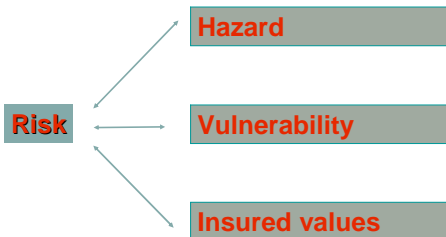
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From Knowledge
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Insurance penetration and building quality as a factor of social vulnerability

As a rule the developing world is poorly insured, although there are strong trends in emerging markets. Building quality is a relevant factor of social vulnerability. Due to poor quality standards the poorest of the poor are those, who in disasters lose their homes.



Example: Natural hazard Earthquake



Earthquake risk is a function of hazard, vulnerability and values or people at risk. In probabilistic models designed to assess losses from future earthquakes, the vulnerability of the objects exposed has a dominating influence on the final results because of the wide range of vulnerabilities for different types of risk. Insurance models are mainly used to calculate two parameters for a certain liability distribution: the Average Annual Loss (AAL) and the Probable Maximum Loss (PML). The AAL is the basis for determining the insurance premium. The PML defines the maximum insured loss for a given value distribution and time period.



- Occupancy type
- Construction year
- Shape
- Foundation
- Relation to adjacent structures
- Construction type
- Height

Vibration characteristics

