



## **Tsunami and Investment in Touristic Business**

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The paper addresses the question of optimal location of hotels, taking into account the risk of their destruction by tsunami waves. The trade-off is between profits flow from tourism and expected life of a hotel. It presents a theoretical model that addresses the practical problem about investment in tourism industry into areas damaged by tsunami taking into account the risk from future tsunami. It uses both economic methods (investment and optimization theory) and stylized facts from the theory of tsunami waves. The optimal location of hotels can be found. It depends on local topography (slope), probability distribution of tsunamis with different wave heights in current location, preferences of tourists and time discount for a country. While additional location-specific studies are required for application of results, some general recommendations can be done already at this stage. If the slope is high, it is no problem to put hotels at tsunami-free elevations (20 m over sea level) and still keep travel time to the beach low. But in locations where the slope is less than 1%, these distances can be about 1 km, causing substantial losses in tourist utility and hotel profits.