

Earthquake Risk Transfer for Greece

Overview

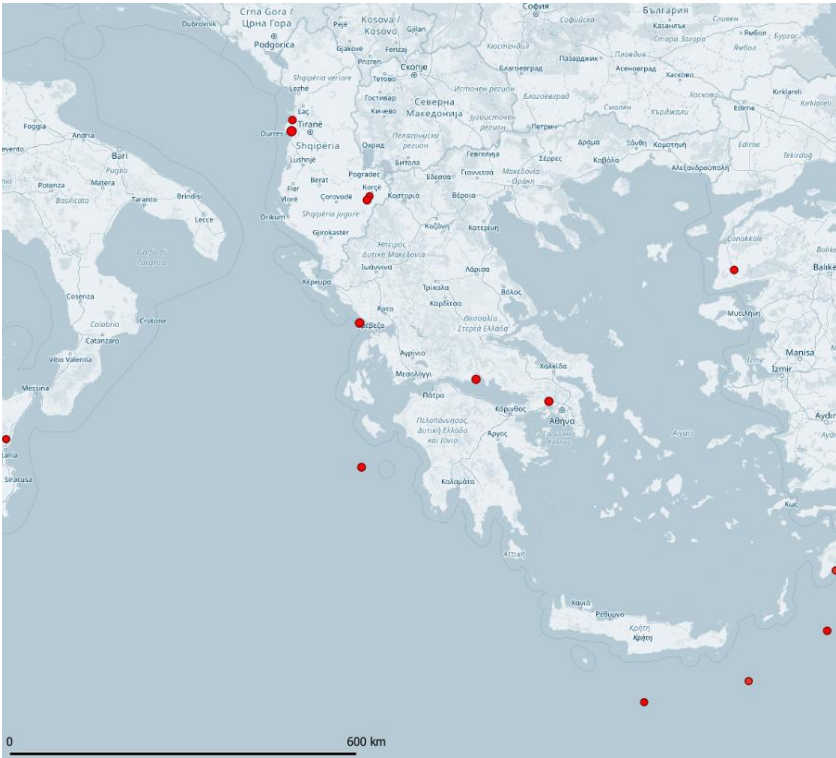


Figure 59. Hash circles represent current Earling undercover regions.

Greece is located at the complex boundary zone in the eastern Mediterranean between the African Plate and the Eurasian Plate. The northern part of Greece lies on the Eurasian Plate while the southern part lies on the Aegean Sea Plate. The Aegean Sea Plate is moving southwestward with respect to the Eurasian Plate at about 30 mm/yr while the African Plate is subducting northwards beneath the Aegean Sea Plate at a rate of about 40 mm/yr. The northern plate boundary is a relatively



diffuse divergent boundary while the southern convergent boundary forms the Hellenic arc. These two plate boundaries give rise to two contrasting tectonic styles, extension on east-west trending fault zones with strike-slip tectonics on SW-NE trending fault zones throughout west and central Greece, Peloponnese and the northern Aegean and contractional in the southern Aegean, continuing around to the Ionian islands. The south Aegean is the location of the volcanic arc and is characterized by extension. To the east of Crete along the Hellenic Arc, strike-slip tectonics with some extension become important. Earling can issue accurate earthquake preparedness alert especially for North of Greece.

EPA Effect on Greece Insurance Loss

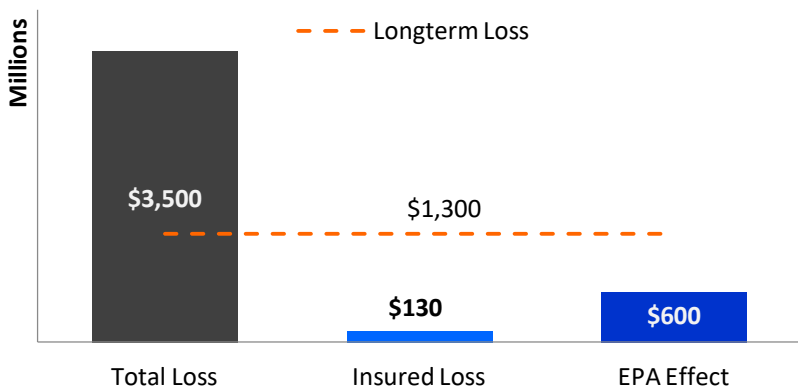


Figure 60. EPA effect on Sep 7, 1999, Greece earthquake (Higgins, 2016).



EPA Effect on Greece Insurance Penetration Rate

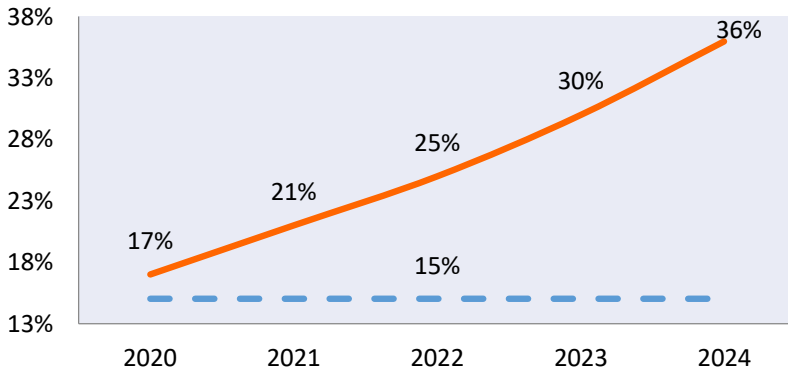


Figure 61. EPA effect on Greece earthquake insurance penetration rate. Earthquake insurance penetration rate was about 15% in 2103 (OECD, 2018).

EPA Effect on Probable Maximum Loss

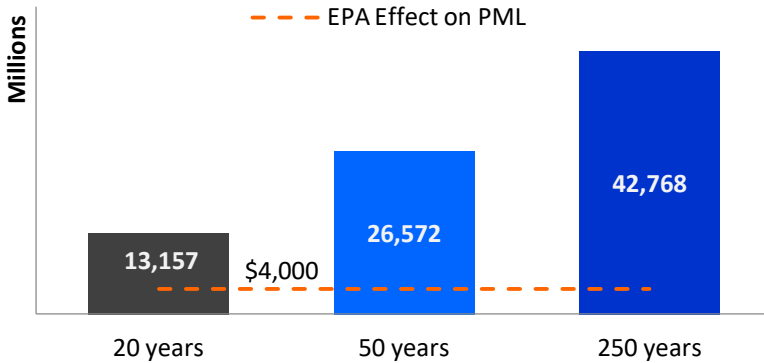


Figure 62. Probable Maximum Loss - Mean return period in. Greece earthquake Average Annual Loss is \$5,109.11 million years (Greece Disaster & Risk Profile, 2014).



Greece recent largest earthquakes

Place	Date
Ionian Sea, offshore Zakynthos	26-Oct-2018
Kos	21-Jul-2017
Lesbos	12-Jun-2017
Lefkada	17-Nov-2015
Limnos	24-May-2014
Dodecanese	15-Jul-2008
Peloponnese	8-Jun-2008

