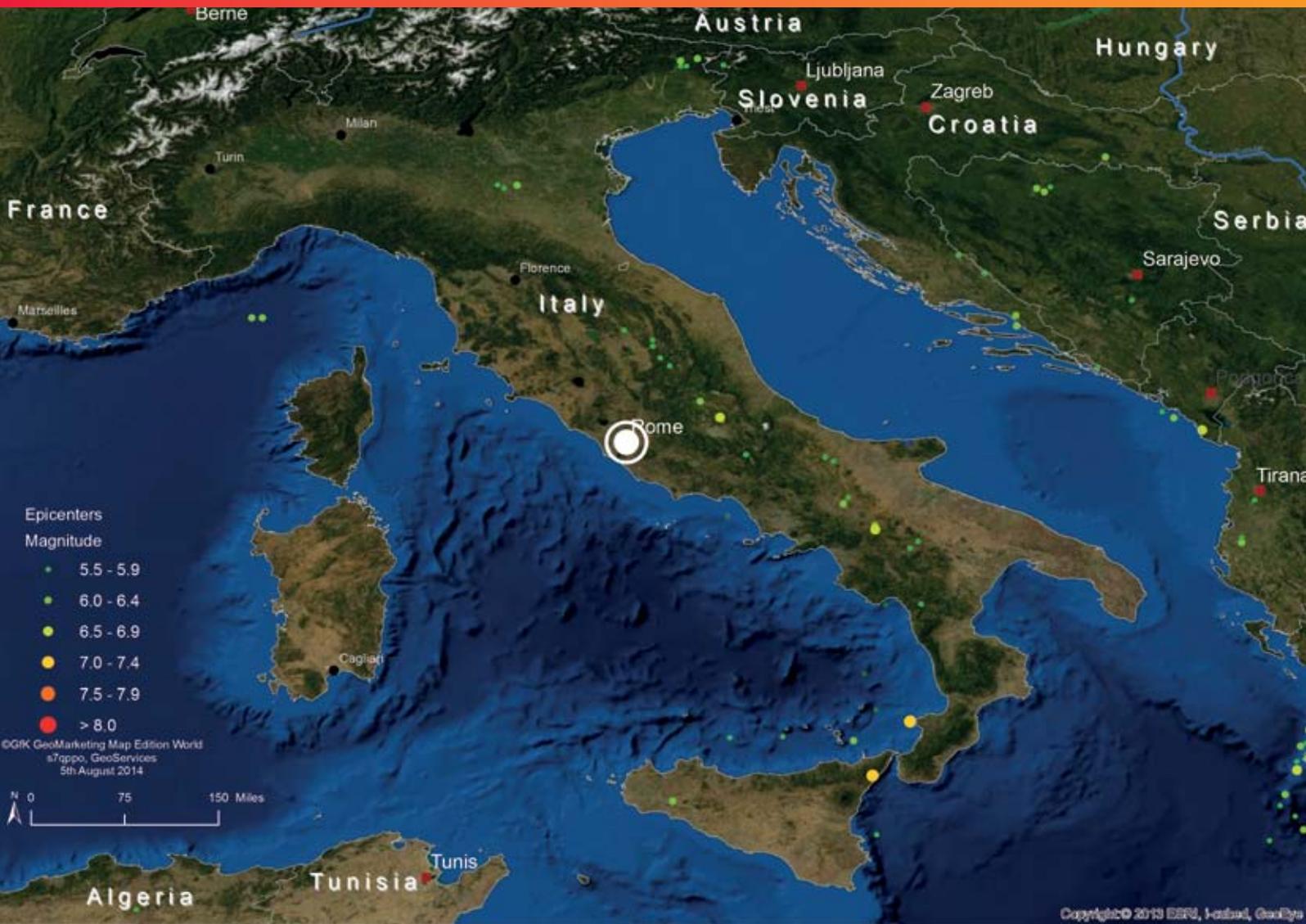


Risky cities:

Rome

Rome is steeped in 2500 years of history and is one of the world's most celebrated cultural centres. What is perhaps not generally known is that this city is also exposed to a high risk of flooding and earthquakes. Using Swiss Re's risk models and detailed hazard data available in CatNet, we have analysed the potential impact of these risks and other natural perils on Rome's metropolitan area. This analysis is part of Swiss Re's report: "Mind the Risk" – a global ranking of cities under threat from natural disasters which compares the human and economic exposure of 616 cities around the world.





CatNet® map showing flood risk in the Rome area

In respect to its exposure to seismic activity, Rome has something in common with Mexico City in that both metropolitan areas are partially built on loosely packed alluvial deposits originating from bodies of water. In Rome's case, it is sediment from the River Tiber and its tributaries. When an earthquake hits either city, this sediment can shift and liquefy,

consequently amplifying the impact of seismic activity. The city might not be the most hazardous in terms of quake risk, but factoring in its commuter towns the numbers of people exposed to this risk are considerable.

But it is not only seismic risk that Romans have to live with. Although there are no large concentrations of people living in

the River Tiber's flood plains, our statistics reveal that of the 4.2 million people in the city's metropolitan area, one in five remains at risk from flooding. Indeed, heavy rain frequently inundates the Italian capital, most recently at the beginning of 2014. The risk posed by torrential rain is exacerbated by the hilly nature of the city, something which can also result in disasterous landslides.



CatNet® map showing earthquake risk throughout Italy

(Source: GSHAP)

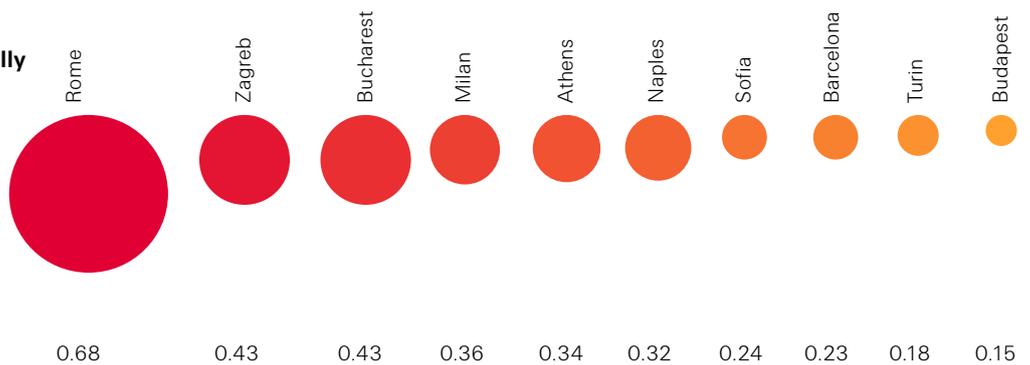
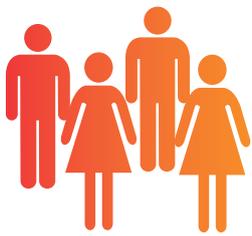
Risky cities: Rome in comparison



Rome's experiences with earthquakes stretch back to antiquity

Human impact

Millions of people potentially affected by earthquake*

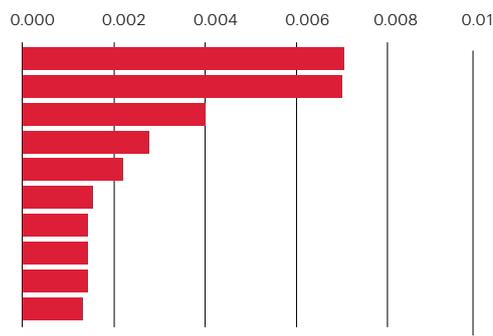


Economic impact

Value of working days lost*
in absolute terms



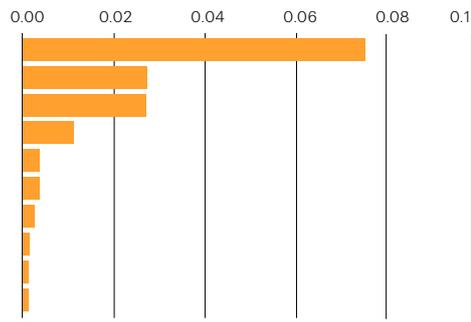
(index 0.00–0.01)



Value of working days lost*
relative to national economy



(index 0.0–0.1)



*Risks only from earthquakes (EU 28)

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What our cities need

An important part of resilience is how well an urban community can bounce back from the financial consequences of a disaster such as an earthquake, in other words how rapidly it can mobilize the resources necessary to expedite its economic recovery.

Global Partnerships – our capability and solutions

To avoid raising taxes and diverting critical assets when the city and its residents are hurting most, Swiss Re offers risk transfer solutions that can assist with covering the financial burden public entities face. Its risk management experts can also help public authorities prepare for natural disasters more comprehensively than perhaps they have done in the past.

Indemnity insurance

can cover damages or losses caused by natural disasters which can range from seismic activity and flood to wind storms. Indemnity insurance provides protection against damage to property or income loss due to interruption to business or services. It is an insurance policy which pays out based on the actual economic losses incurred, up to the limit and duration specified in the insurance contract.

Parametric insurance

can cover earthquakes, for example. Unlike traditional insurance, parametric instruments use measured or modelled data like the physical characteristics of a disaster (e.g. the magnitude of an earthquake) to determine payouts. Such a payout model aims to mirror the actual damage on the ground and enables a much more rapid settlement. This is critical for cities that require budgetary liquidity after a catastrophic event. The rapid payout is possible because a lengthy loss adjustment is not required to assess the actual damage on the ground. An earthquake-impacted community can therefore receive rapid cash to help with emergency response, debris removal or other expenses. Parametric deals can be settled in days or weeks. This is compared to the months or years it may take to finally close a conventional indemnity insurance claim or to await financial assistance from the federal government.

Weather insurance products

are examples of a parametric insurance cover which protect cities against the impact of adverse weather on their property or their ability to operate as expected. This can be in the form of unusually heavy rain or snow requiring additional resources to respond, extreme temperature, or strong wind which may put strain on city services. Such products are generally based on meteorological data such as daily temperature changes, frost or precipitation. They allow local governments to control the financial risks associated with adverse weather.

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The value of CatNet® www.swissre.com/catnet

The CatNet® functions and data facilitate a professional overview and assessment of natural hazard exposure for any location worldwide. This makes CatNet® a valuable tool in preparing local, regional and cross-regional risk profiles.

Concretely, it

- provides swift hazard checks for regions you are unfamiliar with
- generates customised maps combined with satellite images
- enables you to import your location data to illustrate risk exposures combined with natural hazard data
- provides country-specific insurance conditions, claims experience and natural disaster loss dimensions