CATASTROPHE RISKS, ESTIMATED COSTS OF EUR7 BILLION IN ITALY: 41 MILLION PROPERTIES EXPOSED

Launch of the Natural Risk Index: the first map of the economic impact of natural catastrophes (earthquakes, floods and convective storms) in Italy. A new model that measures the combination of peril, vulnerability and exposure.

- **Lombardy, Emilia-Romagna and Veneto are the regions at highest overall risk;**
- **Calabria, Emilia-Romagna and Umbria are at the top of the ranking for loss per inhabitant;**
- **79% of losses caused by natural catastrophes are still borne by individuals, business people and the State.**

Rome, 21 April 2026

The first edition of the **Natural Risk Forum,** a Think Tank sponsored by **Unipol** to encourage comprehensive, strategic reflection on natural **catastrophe risks** and their impact in Italy was held in Rome today at the *Palazzo della Cancelleria.*

Events defined as "exceptional" just a few short years ago are becoming increasingly frequent. Earthquakes, floods and intense weather events directly affect public safety, the continued economic wellbeing of the territories involved and the sustainability of public finances.

In the last 12 years alone, earthquakes, floods and convective storms generated costs of over EUR100 billion, most of which were due to flooding (44.8 billion) and convective storms (36.4 billion).

In light of these figures, understanding the risk is no longer a mere academic exercise, but vital to make informed decisions. The **Natural Risk Index (NRI)** Forum was therefore introduced as a new index to provide concise, comparable measurements of the risk of catastrophes at regional level.

The index uses the catastrophe models developed by Gallagher Re[1] and examines three types of catastrophe events: earthquakes, floods and convective storms[2].

Exposure: extent, characteristics and economic value of property assets

In order to make the NRI measurements, the analysis[3] starts with a map of the **Italian property assets exposed to catastrophe events** by focusing on three macro-sectors: **businesses** (manufacturing and trading businesses); **homes** (residential assets) and **public buildings** (properties owned by the public authorities). On the other hand, infrastructures (roads, bridges, railways, energy grids and water networks) were not included in the calculations as the management of risk in these cases is based on public funds, extraordinary plans or the responsibility of the authorities.

One of the **first results** to emerge was very **significant: 41 million property units in Italy are potentially exposed to catastrophe events.** In terms of geography, the provinces with the highest number of assets exposed are **Rome, Milan** and **Naples.**

The **cost of rebuilding 41 million property units** was then measured.

The figure incorporates the full cost of reconstruction, including both the structural value of the buildings and the cost of the building contents (for example machinery, goods and furniture). The estimate also comprises the cost associated with interrupting manufacturing activities as it takes account of the financial losses that would result from the temporary suspension or reduction of operations following a catastrophe event. Therefore, as a whole, the **value is an integrated measurement of the total economic impact, considering both the direct material loss and the indirect economic effects.**

A second significant figure which emerged from the research was the amount it would **cost to rebuild all the buildings: it would come to EUR14,400 billion, about seven times the national GDP figure.** In terms of the commercial and industrial exposures, the geographic distribution of

[1] Gallagher Re is one of the most important reinsurance brokers in Italy and the world; it is part of the Gallagher group, listed on the NYSE and is a multinational company that operates in over 120 countries. It is one of the most important global operators in insurance brokerage and risk management.

[2] Convective storms: weather events associated with hot, humid days that can produce hailstorms, strong winds and tornadoes.

[3] The analysis was carried out on a high-resolution basis (at the level of area codes) and included territorial information from the ISTAT (national statistics institute), the Ministry of Economic Affairs and Finance and Land Registry statistics, as well as the regional distribution of insured exposures set out in the Gallagher Re portfolio. This mix of input meant that the location of the properties, the building density and the regional differences in construction type and vulnerability to various natural risks could be shown on a consistent basis. The geographic element is therefore integral to calculating the index as it enables a reflection to be made on both the overall volume of the assets and their actual distribution throughout Italy.

this figure is inconsistent between north and south, while there is a more uniform distribution in terms of residential buildings.

Natural Risk Index (NRI)

The Natural Risk Index (NRI) represents a significantly improved development in this regard as it combines the three aspects of risk into a single index[4]: ***Peril*** (the likelihood that a loss-making event will occur in a certain area), ***Exposure*** (the economic value of the assets and activities in a territory potentially subject to catastrophe events) and ***Vulnerability*** (to what extent said assets are likely to suffer economic losses). The NRI does not provide an absolute estimate of the average annual regional cost, but allows for a valuation and comparison to be made of the relative weight of the risk among the various regions of Italy.

The Regions with the highest NRI are Lombardy, Emilia-Romagna and **Veneto.** Based on the results of the analyses, the risk of catastrophe in Italy appears to be strongly affected by the interaction between **natural peril and concentration of economic value**: the areas with the highest density of housing, businesses and public buildings are the most exposed in absolute terms.

The graphs below show the territorial distribution of the **Natural Risk Index** by Italian region for all perils (earthquakes, floods and convective storms). The **colour scale** represents the value of the index, with darker tones indicating a higher relative economic impact. For greater clarity, the **numbers shown** for each region indicate their **ranking**, with 1 corresponding to the region with the **highest value** on the Natural Risk Index and 20 corresponding to the **lowest value.**

Terremoto

Rank	Regione	Natural Risk Index Terremoto
1	Emilia Romagna	18.5%
2	Veneto	10.9%
3	Sicilia	10.4%

Alluvione

Rank	Regione	Natural Risk Index Alluvione
1	Toscana	21.6%
2	Lombardia	13.8%
3	Veneto	11.0%

Tempeste Convettive

Rank	Regione	Natural Risk Index Tempeste Convettive
1	Lombardia	26.6%
2	Veneto	15.8%
3	Piemonte	9.7%

Totale

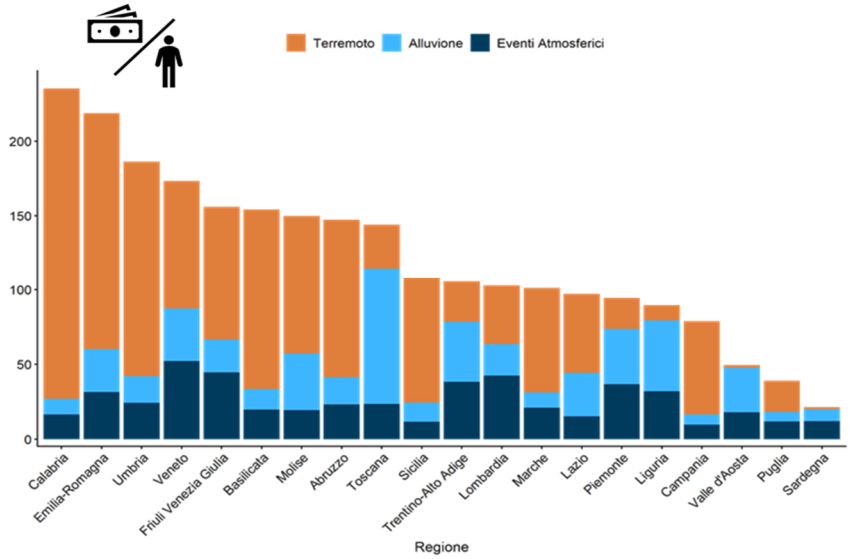
Rank	Regione	Natural Risk Index Totale
1	Lombardia	14.8%
2	Emilia Romagna	14.0%
3	Veneto	12.1%

[4] For more information on the methods used to calculate the NRI, please refer to Chapter 8, Appendix, of the second NRF Research Manual *"L'impatto economico delle catastrofi naturali in Italia: il Natural risk Index"* (the economic impact of natural catastrophes in Italy: the natural risk index).

Estimated average annual cost following natural catastrophes

While the NRI provides a measurement relating to the risk, an analysis of the estimated average annual cost allows the absolute extent of the risk to be understood. **Research estimates that the average annual cost of natural catastrophes amounts to approximately EUR7 billion per year.**

ESTIMATED AVERAGE COST PER INHABITANT BY PERIL (EURO)



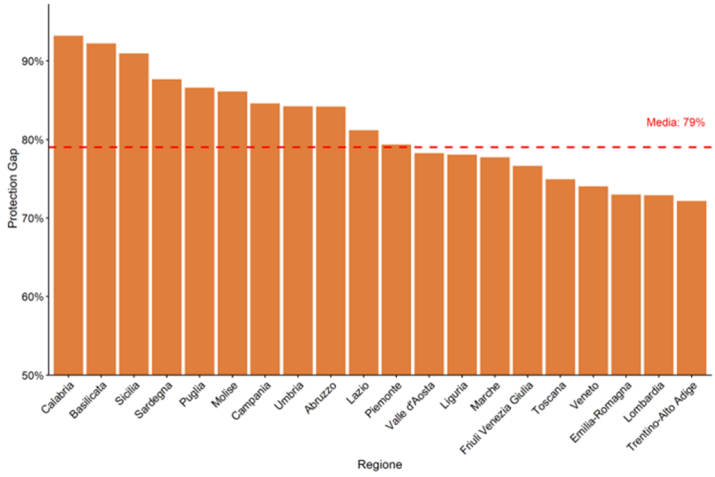
In this context, the estimated average expected cost per inhabitant, according to the analysis, is typically between EUR100 and 200. Calabria, Emilia-Romagna and Umbria are at the head of the ranking in terms of loss per inhabitant, with Valle d'Aosta, Puglia and Sardinia bringing up the rear.

Protection Gap

Another element that emerged from the analyses related to the **Protection Gap, i.e. the percentage of costs which would not be covered by insurance in the case of a catastrophe event.**

Research shows that the **Protection Gap in Italy currently amounts to 79%:** for every 100 in potential loss, **only 21 is covered by insurance.** This percentage varies among Italian regions, ranging from 72% in Trentino-Alto Adige, the region with the highest relative cover, to 93% in Calabria.

PROTECTION GAP PER REGION



Conclusions

Natural risks cannot be eliminated. However, they can be **understood, measured and managed.** That is what the NRI aims to do: transform complex data into knowledge that can be used by institutions to steer prevention and mitigation policies; for the territories to increase their awareness of their own fragilities and priorities; for the insurance market to develop solutions more consistent with the real risk.

Enrico San Pietro, Unipol Group Insurance General Manager said *"the Natural Risk Index was devised to make an important contribution towards improving how we read and tackle catastrophe risk in our country. We clearly have to urgently take a systematic, integrated approach based on the structural reduction of risk in the most vulnerable areas through increasing insurance cover, developing prevention policies, adapting on the basis of data and advanced analyses and scaling up the financial and operational resilience of the economic system".*

Stefano Genovese, Unipol Head of Institutional & Public Affairs and Coordinator of the Natural Risk Forum Think Tank said *"the Natural Risk Forum is intended to be an accredited centre for dialogue among institutions, the research world and the private sector in the area of natural catastrophes. The value of prevention and reducing territorial vulnerability goes beyond insurance alone and requires governance to be established to manage risk as a whole on the basis of a true public-private partnership and the scientific analysis of the data".*

Luigi Ferrara, Head of Department, Casa Italia (government department involved in the managing of calamitous events) **Presidency of the Council of Ministers** said *"Occasions like the present are essential for taking stock of the risks of catastrophe in our country and help us take a more informed, integrated and efficient approach to their management. Properly understanding the vulnerability of the territory and translating this awareness into actual prevention, mitigation and*

adaptation is now a priority that can no longer be postponed in the face of phenomena that will increasingly affect the future of Italy."

The following appeared in the following order: **Stefano Genovese**, Head of Institutional & Public Affairs of Unipol; **Guido Castelli**, Special Government Commissioner for the 2016 earthquake repair and reconstruction; **Fabrizio Curcio**, Special Government Commissioner for the flooding in Emilia-Romagna, Tuscany and Marche; **Federico Freni**, Undersecretary, Ministry of Economy and Finance; **Federico Eichberg**, Head of Cabinet, Ministry of Industry and Made in Italy; **Enrico San Pietro**, Group Insurance General Manager of Unipol; **Massimiliano Arizzi**, Chief Executive Officer, Gallagher Re Italy; **Martina Bignami**, Head of Supervisory Regulations and Policies Directorate, IVASS (Institute for the Supervision of Insurance); **Pasquale Ciacciarelli**, Councillor in charge of Civil Protection, Lazio Region; **Marco Fioravanti**, Chair of the Anci (Italian Association of Municipalities) Board and Mayor of Ascoli Piceno; **Attilio Fontana**, President of the Lombardy Region; **Stefania Proietti,** President of the Umbria Region; **Fausto Bianchi**, National Chair of Small Industries, Confindustria; **Pino Bicchielli**, Chair of the Parliamentary Commission of the inquiry into hydrogeological and earthquake risk, Chamber of Deputies; **Gianfrancesco Romeo**, General Director of the Consumers and Market Head Office, Ministry of Industry and Made in Italy; **Massimo Chiappini**, Director of Research, National Institute of Geophysics and Vulcanology (INGV); **Laura D'Aprile**, Head of Department of Sustainable Development (DiSS), Ministry of the Environment and Energy Security; **Stefano Pasqualini**, Head of the Macroprudential Analysis Division, IVASS (Institute for the Supervision of Insurance); **Maria Siclari**, General Director of the Higher Institute for Environmental Protection and Research (ISPRA), and concluding with **Luigi Ferrara**, Head of Department, Casa Italia, Presidency of the Council of Ministers.

Unipol Group

It is one of the leading insurance groups in Europe as well as being leader in Italy in the non-life insurance business (especially MV and health), with total premiums of €17.4bn that include €9.6bn in non-life income and €7.8bn in life income (2025 figures). It takes an integrated approach to cover the entire range of insurance products and services, mainly operating through the parent company Unipol Assicurazioni, UniSalute (the leading health insurer in Italy), Linear (direct MV insurance), Arca Vita and Arca Assicurazioni (life and non-life bancassurance through the branches of BPER, Banca Popolare di Sondrio and other banks), SIAT (transport insurance) and DDOR (insurance company operating in Serbia). It also operates in the real estate, hotel (UNA Italian Hospitality), medical-healthcare (Santagostino) and viticultural (Tenute del Cerro) sectors. The ordinary shares of Unipol Assicurazioni S.p.A. have been listed on the Italian Stock Exchange since 1990, and are also on the FTSE MIB® and MIB® ESG indexes

For further information:
Press office Unipol Group
Fernando Vacarini - pressoffice@unipol.it
Barabino&Partners
Massimiliano Parboni - Tel: 335 8304078 – m.parboni@barabino.it