IVASS
ISTITUTO PER LA VIGILANZA SULLE ASSICURAZIONI

Survey on policies covering natural catastrophes

June 2024

Report 2024
Survey on policies covering natural catastrophes

June 2024

Edited by: Annamaria Damiani, Annalisa Bellizzi, Maria Cristina Giustiniani and Rita Greco

All rights reserved

Reproduction for scholarly and non-commercial use permitted on condition that the source is cited

Designed and printed by the Printing and Publishing Division of the Bank of Italy

Index

1. Introduction 5

2. Main findings 6

The supply 6

Coverage and exclusions 7

Clarity of contracts 7

Damage assessment and compensation 8

3. Analysis of the definitions of catastrophe risks 8

4. Compensation criteria 9

5. Maximum amounts of cover and deductibles 9

6. The covers offered 10

6.1 Policies for SMEs 10

6.1.1 Insurability requirements for buildings 11

6.1.2 “Earthquake” coverage 12

6.1.2.1 Exclusions and limitations 12

6.1.3 “Floods” coverage 13

6.1.3.1 Exclusions and limitations 14

6.1.4 “Landslides” coverage 15

6.1.5 Coverage against “overflowing rivers” 15

6.1.6 “Flooding” coverage 16

6.1.6.1 Exclusions and limitations 16

6.1.6.2 Deductibles, excesses and maximum amounts of cover 16

6.2 Parametric policies for catastrophic events 17

6.3 Policies for retail customers 18

6.3.1 Insurability requirements for buildings 20

6.3.2 “Earthquake” coverage 21

6.3.2.1 Exclusions and limitations 22

6.3.3 “Flood” coverage 22
6.3.3.1 Exclusions and limitations 23
6.3.4 Flooding and flash flood coverage 24
6.3.4.1 Exclusions and limitations 24
7. Conclusions 24
Appendix 1. Analysis of definitions and glossaries 26

1. Introduction

The topics of climate change and natural disasters have become increasingly relevant in recent years as a result of the increased frequency of extreme weather events and the extent of the damage caused.

The 2024 Budget Law[1] stipulated that by December 31, 2024, production businesses are required to take out insurance coverage against catastrophe risks, identified as **earthquakes, floods, landslides, and overflowing rivers**. The following events are covered:

- land and buildings
- plant and machinery
- industrial and commercial equipment.

Insurance companies are, in turn, obliged to "provide insurance", that is, to accept risks, in a manner that will be the subject of technical clarifications in a decree of the Ministry of the Economy and Finance in consultation with the Ministry of Enterprises and Made in Italy.

At the end of 2023, the Superbonus decree[2] provided for a similar insurance obligation for taxpayers who benefit from the 110% deduction for their real estate, in relation to interventions carried out after 30 December 2023 in municipalities in territories already affected by earthquakes.

In order for the new system to be effectively and widely applied, simplicity of the insurance products offered, the adoption of simplified underwriting methods, and maximum transparency regarding the extent of cover and possible exclusions and limitations will be crucial.

---

1 See art. 1, par. 101-112 of Law No. 213 of 30 December 2023, OJ - General series No. 303.
The obligation concerns Italian production businesses (or foreign undertakings operating in Italy on a permanent basis), which are required to take out, by December 31, 2024, insurance contracts covering damage to property directly caused by natural disasters and catastrophic events occurred in the Italian territory. This obligation shall not apply to agricultural enterprises and undertakings whose real estate is encumbered by building violations or constructed without the required permits, or encumbered by abuse that occurred after the date of construction.

2 See art. 2, par. 2 of decree-law No. 212/2023 converted into law No. 17/2024 (published in the OJ General series - no. 48 of 27/02/2024).

In view of these significant innovations, IVASS has analysed the current offer on the Italian market of policies against catastrophe risks, with the aim of grasping their main features and offering possible suggestions for the design of new products.

The analysis focused on so-called "standard" policies, i.e. those with predefined contents (the texts of which are available on the companies' websites), intended for small and medium-sized enterprises (SMEs) and for individuals and households, and not also those stipulated by larger production companies, the contents of which are tailor-made in consultation with the company.

46 policies on the market as of January 2024, offered by 14 insurance companies, were examined, including:

- **34 for SME**
- **12 for individuals and households (retail customers).**

The catastrophe risks identified by the budget law were considered: earthquakes, floods, landslides, and overflowing rivers.

The survey was based on the analysis of contract texts and does not enter into the assessment of the convenience of the policies and disregards their commercial success, measured by the level of premium income associated with them. The reference to the policies mentioned in this Report does not imply an approval by IVASS.

2. Main findings

The supply

a) The supply mainly concerns catastrophe coverage that can be added to "Fire and Damage to Property" policies with the payment of an additional premium;

b) the supply of policies offering only catastrophe risk coverage (so-called stand alone) is very small and limited to two companies;

c) there are also three parametric policies on the market, i.e. policies in which the payment of compensation is triggered automatically upon the occurrence of a predetermined index;

d) the supply is broader, including in content, for SMEs than for retail customers.

Coverage and exclusions

e) the covers are highly varied: the composition of catastrophe guarantees is heterogeneous both in the range of cover offered and in their content;

f) the generality of the policies examined for SMEs offer cover for the events "earthquake", "floods and flooding"[3], "landslides"[4], "flooding"[5], in retail policies; conversely, cover for "landslides and subsidence" is included in "floods and flooding" by only three companies, while it is excluded by seven companies;

g) no policy provides cover for "overflowing rivers", a catastrophic event envisaged by the new law;

h) guarantees cover direct and material damage to insured property caused by catastrophic events; in some cases, they also cover indirect damage, such as increased costs or reduced revenues resulting from business interruption or disruption of normal business activity;

i) several policies provide for the payment of an advance on the damages in order to allow the insured to start restoration activities immediately;

j) there are specific exclusions for each cover (earthquake, floods and flooding, landslides and subsidence) in addition to those common in the basic cover (Fire and Damage to Property).

Clarity of contracts

k) policy conditions are not always clear and easy to understand;

l) the definitions of catastrophe risks are not always homogeneous between companies nor are they complete; sometimes they contain references to the intensity of phenomena (e.g. a minimum degree on the Richter Scale for earthquakes or a certain intensity for floods);

m) in order to gather information on the characteristics of buildings, the policyholder is required to fill in complex questionnaires, with technical information of which he/she may be unaware, such as the stability of the building or the compliance of roofs and canopies with current regulations;

---

3 The two risks are always insured together and are generally understood to be synonymous.

4 In most cases, the "landslide" risk is only indirectly insured, i.e. as a consequence of floods and flooding.

5 Often associated with the risks "floods and flooding", even in glossaries, and insured together with the same risks.

n) the insurability requirements for buildings are sometimes designed on the basic "fire" guarantee and this generates inconsistencies where information is requested from the client that is not immediately related to catastrophe risks, such as the use of fire-proof building construction materials or the possible presence of explosives.

Damage assessment and compensation

o) the quantification of the value of the goods to be insured is left to the policyholder; the assessment of the adequacy of the sum insured is ordinarily made by the company only at the time of the claim;

p) the policies provide for the option of insuring the value of the property in its state of use or the reconstruction/replacement value as new. In the latter case, however, the value as new is recognised only after actual reconstruction or replacement;

q) the area on which the insured property rests does not contribute to the value to be insured.

3. Analysis of the definitions of catastrophe risks

The definitions of individual catastrophe risks in the policy glossaries were first analysed to check their clarity and degree of homogeneity between companies (see Appendix 1).

Substantial homogeneity in the definitions emerged, with a few exceptions: this could make it difficult for policyholders to understand the exact scope of cover offered, including in terms of comparability between policies.

For example, an earthquake is sometimes defined according to its magnitude: some companies set minimum intensity values according to the Richter scale (see section 6.1.2), and for floods they require the event to have a certain intensity.

The definition of "flooding" does not always include the phenomenon of so-called "flash floods", and that of "landslide" (including "landslide", "subsidence", "collapse") is present in only a few glossaries.

4. Compensation criteria

Damage to the building and its contents is generally covered on a **"full amount"** basis: under this formula, the sum insured stated in the policy covers the entire value of the insured property. If, at the time of the claim, the ascertained value of the property is higher than the sum insured, the proportional rule envisaged in article 1907 of the Civil Code shall apply. According to this rule, if the insured sum covers only part of the total value of the insured goods, the company is liable for damages in proportion to that part.

If expressly provided, the **"first absolute risk"** formula shall be applied, under which the company shall be liable for damages within the sum insured, regardless of the total value of the insured goods, without the proportional reduction of indemnity envisaged in article 1907 of the Civil Code.

In addition, it is generally provided that the building and its contents may be insured under the so-called **"value as new"** formula, by which is meant, for the building, the "cost of reconstruction" with goods equivalent in materials, type, construction characteristics, size and functionality, and, for the contents, the "cost of replacement" with goods of similar utility, currently offered on the market.

5. Maximum amounts of cover and deductibles

It was not possible to analyse the levels of deductibles, excesses and maximum amounts of cover because, as is usually the case with non-life policies, the relevant values are not stated in the policy conditions, but are set when the contract is concluded and indicated in the policy form.

In the few cases where they are present in the conditions, the **maximum amounts of cover** are indicated per claim and insurance year. In particular, they are provided by five companies in policies for SMEs and by four companies in retail policies. Values are reported below, although, as mentioned, they are of limited informative value.

For buildings, the maximum amounts vary from a minimum of €20,000 to a maximum of €100,000. Two companies provide a maximum amount of cover of €50,000.

With reference to the contents of the building, the maximum amounts vary from a minimum of €5,000 to a maximum of €50,000.

The maximum amounts of cover for flooding per single claim vary from a minimum of €7,500 for retail policies to a maximum of €100,000 for SMEs.

In one case, the maximum amounts for building and contents are expressed as a percentage (up to a maximum of between 50% and 80%).

With reference to **deductibles and excesses**, in some cases specific limitations apply per type of insured good (building, building contents, valuables or objects of artistic value, etc.) and/or per type of indemnified expense (e.g. demolition and disposal costs, removal and transport, expert's fees, etc.)[6].

6. The covers offered

6.1 Policies for SMEs

The covers contained in modular or multi-risk policies are always offered as additional covers to *"damage to property - fire, explosion and blast"* and require payment of an extra premium over and above that for the basic cover.

Direct and material damage to insured property caused by the catastrophic event is covered, and in particular:

- damage to buildings is always covered, while damage to the land on which the buildings are built is normally expressly excluded;
- machinery, equipment, furnishings and furniture, goods are also generally insured;
- seven companies also insure valuables, precious items, and items of artistic value;
- six companies also insure archives and data carriers, models and moulds;
- two companies also insure leased goods or, more generally, assets owned by third parties;
- six companies insure solar panels and photovoltaic systems installed on buildings.

6 This is the case, for example, of a company that provides, in its SME policies covering both "earthquake" and "floods", that the compensation to be paid for damage to the building is calculated by deducting from the ascertained damage an amount equal to either 10% of the sum insured or 5% thereof with a minimum of €5,000 and a maximum of €50,000, depending on the choice made by the policyholder and indicated in the policy form.

For damage to the building and its contents, insurance is provided on a *"full amount"* basis; in some cases, the following costs are also included: costs of demolishing and clearing away the residue of the claim, costs incurred in restoring the premises, fees of experts and consultants for ascertaining the damage and settling the claim, and the costs of redesigning the building.

In other cases, companies also insure **indirect damages**, such as higher costs incurred or lower revenues earned as a result of business interruption or disruption of normal business activity.

Seven companies provide **assistance services** for emergency interventions resulting from the insured event, such as sending a plumber, drying experts, security personnel or guards, reimbursement of expenses for the insured's early return from a trip.

Three companies recognise the insured party's right to receive, at the policyholder's request during the loss assessment phase, and thus prior to the final settlement of the claim, an **advance payment** equal to 50% of the presumed amount of the loss, provided that the latter is at least €15,000/50,000.

There are typical exclusions for each catastrophe cover, which, in the case of an earthquake, are in addition to the general exclusions for fire and blasts, as well as specific limitations, deductibles (the amount of which is generally not specified in the insurance terms and conditions, where reference is made to the policy) and excesses.

6.1.1 Insurability requirements for buildings

All of the policies examined stipulate that cover is only provided if the buildings to be insured meet certain construction requirements.

Companies usually classify buildings according to *classes of merit*, generally from 2 to 4, characterised by gradually increasing requirements in terms of robustness and quality, with which progressive premium reductions can be obtained.

Since covers are always linked to the fire cover, in some cases the fire resistance characteristics of materials are also considered, although not directly relevant to certain catastrophe risks. The existence of explosives, flammables and special goods affects the risk assessment and must therefore be expressly declared in the policy[7].

The characteristics of the buildings must be declared by the policyholder.

7 Companies have specific risk tolerance thresholds. The generally tolerated quantity for explosive materials is 1 kg, while for flammable materials and special goods it ranges from 500 kg to 1000 kg.

This represents a point of attention and complexity, as the policyholder may not be aware of the construction features that require highly technical expertise.

6.1.2 "Earthquake" coverage

In all the policies examined, earthquake is defined as an *"abrupt and sudden upheaval of the earth's crust due to endogenous causes"* and it is specified that *"the tremors recorded in the 72 hours following the first event that gave rise to a claim eligible for indemnification are attributed to the same telluric episode and the related damages are therefore considered as a single claim".*

Most policies contain no indication of the minimum earthquake magnitude above which cover is triggered, while 7 (out of 34) indicate a minimum threshold on the Richter Scale (ML), as certified by the Istituto Nazionale di Geofisica e Vulcanologia (INGV - National Institute of Geophysics and Volcanology): four set it at 3.5°, two at 4.0° and one at 5.0°.

In some cases, it is also specified that the guarantee shall apply *"provided that the property is located in an area identified among those affected by the earthquake in the measures taken by the competent authorities".*

The "earthquake" guarantee always covers material and direct damage to insured property caused by an earthquake, eight companies also cover cases of fire, bursting and explosion resulting from the earthquake.

Seven companies also insure expenses for: demolition, disposal, clearance and transport of the residue of the claim to the nearest suitable landfill site; removal, transport, storage and relocation of the insured movable property to enable the restoration of the premises; payment of the fees of experts and consultants appointed for the assessment of damages and the settlement of claims; redesign of the building, including charges for reconstruction of the building itself, excluding any fines, administrative penalties, etc.

Five companies also cover **indirect damage**, such as increased costs or reduced revenues resulting from business interruption or disruption of normal business activity: compensation is mostly in the form of a daily allowance for business interruption.

One company also offers assistance following the earthquake through the intervention of a specialised company to carry out damage limitation and safety work.

6.1.2.1 Exclusions and limitations

Earthquake coverage excludes damage caused by:

a) volcanic eruption, floods and tidal wave;

b) blackout or abnormal production or distribution of electrical, thermal or hydraulic energy, unless such circumstances are related to the direct effect of the earthquake on the insured property and are not covered by any other cover under the same insurance policy;

c) theft, loss, robbery, looting or due to shortages of any kind;

d) explosion, emanation of heat or radiation resulting from transmutations of the nucleus of the atom or from radiation caused by artificial acceleration of atomic particles, even if such phenomena were caused by an earthquake.

Damage to the following is also excluded:

e) the building, if the "rental risk" is already insured[8];

f) buildings constructed without the necessary building authorisations in accordance with current urban planning regulations, as well as those declared unfit for habitation by an order of the Authority at the time the policy was taken out;

g) movable property outdoors or inside buildings open on one or more sides or incomplete in their roofs or frames, canopies;

h) trees, bushes, floral and agricultural crops in general.

One company also provides that, if the policy form states that the building (operational headquarters and appurtenances) has undergone earthquake retrofitting in its entirety and integrity, a premium reduction is applied. If, at the time of the claim, such circumstance is not proven by adequate technical documentation, the indemnity due as described above shall be reduced by 10%.

6.1.3 "Floods" coverage

All policies offer a single guarantee to cover flood damage; in four cases, "flooding" is also included. Cases of fire, bursting and explosion resulting from floods and flooding are also covered. Many policies extend the validity of the cover to floods and flooding caused by earthquakes or by landslides or land subsidence.

8 "Rental risk" insurance protects the tenant from any direct compensation to the landlord and falls within the scope of the "Liability Insurance" section linked to the Fire class (Articles 1588, 1589 and 1611 of the Italian Civil Code). In fact, the tenant is obliged to return everything it has received under the lease in the same condition as at the time of the lease.

The guarantees cover, in general, *"direct and material damage to the insured property caused by the leakage of water, and what it carries, from the usual banks of watercourses and/or reservoirs".*

As part of the insurability requirements, three companies require that *"the event be characterised by violence that can be seen in the effects produced on a plurality of entities, whether insured or not"* and one company states that *"the cover is effective only if the damaging effects can also be seen on other insured and uninsured goods, structures and buildings located in the vicinity".*

In addition to direct damage, insurance may cover the costs of demolition, disposal and transport of the residue of the loss to the nearest landfill site[9], storage and relocation of the insured movable property to restore the premises, payment of the fees of experts and consultants appointed for the assessment of damages and the settlement of claims, redesign and reconstruction of the building[10]. Five companies compensate for business interruption.

The guarantee provided includes waiting periods of 15, 20 or 60 days.

6.1.3.1 Exclusions and limitations

As a rule, in addition to certain exclusions mentioned in section 6.1.2.1, damage caused by the following is excluded:

a) coastal storm, tide, seawater penetration;

b) landslides, land subsidence, avalanches and snow slides;

c) cracks, breaks or damage to the roof, walls or windows by wind or hail;

d) frost, damp, dripping, seepage, even if resulting from the subject matter of the insurance cover;

e) goods whose base is less than 10 cm above the floor[11], except those which, due to their weight and/or size, cannot be stored on racks, shelves or pallets;

f) things contained in underground or basement rooms.

Some of the exclusions significantly reduce the scope of the guarantee offered, such as in the case of damage from landslides, land subsidence or collapse, from moisture, and for goods being placed at a given distance from the ground.

---

9 Some policies include the transport of toxic or radioactive materials, others expressly exclude them.

10 A company also insures the costs of redesigning damaged photovoltaic systems and earthquake-proof retrofitting of the building.

11 In the policies offered by a company, the exclusion applies to goods whose base is less than 12 cm above the floor.

In three cases, the specific exclusions contradict the provisions in the coverage[12].

6.1.4 "Landslides" coverage

The event "landslide" (including "land subsidence" or "collapse") is not defined in the glossaries, except for one company[13].

Two companies insure material and direct damage to goods in transit[14] in the event of landslides, avalanches, sinkholes, broken bridges and collapsed roads.

In addition, two companies[15] pay compensation in the form of a daily allowance for business interruption (indirect damage) caused by the inaccessibility of the premises of the accommodation facility due to the blockage of access roads resulting from extraordinary weather events (such as landslides, avalanches, flooding, etc.).

Nine companies always cover liability for damage caused to third parties; in most cases, provided that the damage in question "*does not result from work involving undercutting or other replacement techniques".* For damage caused to third parties, companies provide specific excesses, usually 10%, and minimum indemnity amounts, to which are added, in some cases, indemnity limits and deductibles.

There are no specific exclusions.

6.1.5 Coverage against "overflowing rivers"

No company specifically insures the event "overflowing rivers".

Two companies, however, include the event "overflowing rivers" in the definitions of "floods and flooding". One company also expressly excludes the event "overflowing rivers" from the definition of the event "floods" provided in the glossaries.

---

12 The three policies exclude damage caused by landslides, land subsidence or collapse, while the wording of the guarantee states that damage caused by "floods and flooding" is covered, even if caused by "landslides, land subsidence or collapse".

13 One company defines the event "landslide" in a policy in which it does not offer cover for such an event; the same company does not provide any definition of the event "landslide" in another policy, in which it offers cover for liability arising from damage to third parties caused by "landslides".

14 One company also insures damage to transported equipment.

15 Two companies for policies specifically aimed at businesses in the tourism sector (hotels and bathing establishments).

6.1.6 "Flooding" coverage

All policies include cover for direct and material damage caused by "flooding", which, in some cases, is offered together with "floods" cover, or together with cover for property damage in the event of fire, as an additional guarantee.

Three companies, in addition to direct damage, insure the costs of demolition, disposal and transport of the residue of the loss to the nearest landfill site, storage and relocation of insured movable property to restore the premises, payment of the fees of experts and consultants appointed for damage assessment and claim settlement, redesign and reconstruction of the building.

In two cases, indirect damage is also covered: with compensation in the form of a daily allowance for business interruption[16].

In addition, seven companies also provide assistance for emergency interventions resulting from the insured event, such as sending a plumber, drying experts, security personnel or guards, reimbursement of expenses for the insured's early return from a trip, etc.

6.1.6.1 Exclusions and limitations

The exclusions relating to "flooding" coverage, in addition to those indicated for earthquake cover (section 6.1.2.1.) and flood cover (section 6.1.3.1.), include:

a) structural collapse;

b) breakage of automatic water and thermal extinguishing systems;

c) breaking of solar thermal systems.

6.1.6.2 Deductibles, excesses and maximum amounts of cover

Specific limitations, such as deductibles, excesses, etc., are hardly ever envisaged, because the general limitations of the "floods" guarantees, to which the "flooding" cover is often associated, shall apply. Exceptions are seven policies offered by three companies, which identify specific deductibles, limits and sublimits of compensation for certain types of insured goods: e.g. goods located in basements or cellars and marquees, tensile structures and their contents.

16 One of the two companies also indemnifies the insured businesses for loss of turnover, loss of rent, and additional expenses incurred as a result of the occurrence of the event.

6.2 Parametric policies for catastrophic events

The offer also includes so-called **parametric policies**.

These policies are tailored to the needs of the individual company and cover is linked to the occurrence of predefined events, e.g. rainfall level or wind speed[17].

Parametric policies make it possible to settle claims quickly, as they provide for compensation agreed in advance in the contract, which is not commensurate with the damage actually suffered, but is paid automatically by the insurance company, without the need for a claim report or technical expertise, when a third party, called the "oracle"[18], verifies that the parameter indicated in the policy has been exceeded.

Parameter, premium and indemnity are established ex ante in the policy.

In Italy, there are two companies active in this sector, which – using blockchain technology – offer:

- for SMEs, a policy covering the emergency expenses to be incurred in the event of an earthquake of a certain intensity (the premium is calculated on the basis of the probability of the event);
- for medium and large enterprises:
  - a parametric policy with catastrophe cover for earthquakes, cyclones, floods;
  - a parametric policy for the agricultural sector that also offers cover for hailstorms and frost.

In such cases, compensation is automatically paid when satellite data or sensors placed directly at the insured location record that an a priori defined threshold has been exceeded (e.g. if a predefined category of cyclones exceeds a predefined distance circle around the insured location or predefined thresholds for the size of hailstones and the intensity of the phenomenon at local level, or if a flood, detected by cameras or other specific detectors, has caused damage to SMEs or crops of agricultural enterprises, etc.)

In particular, the policy devised by a company in the event of an earthquake – in addition to the traditional All Risks guarantees covering SMEs from damage caused

17 https://www.ivass.it/pubblicazioni-e-statistiche/statistiche/bollettino-statistico/2020/n3/Allegato_D_GLOSSARIO.pdf

18 Usually the role of "oracle" is played by a scientific body, agency or government institute, which fulfils the requirements of neutrality and is responsible for verifying that the parameter has been activated, providing assurance that the event has actually occurred, and, therefore, that the insured claim has occurred.

by fire, theft, machine failure, business interruption and catastrophic events (such as earthquake, floods and flooding) – includes a parametric component useful for paying the first and urgent emergency management expenses, including those arising from logistical difficulties in the supply chain.

The cover is triggered upon the occurrence of an earthquake that causes the 30%g threshold of the parameter considered for the parametric guarantee (PGA) to be exceeded[19].

The exceeding of the 30%g threshold of the PGA, which automatically triggers the indemnity, must be validated by the Istituto Nazionale di Geofisica e Vulcanologia, a third and independent party, which acts as an "oracle" and certifies the occurrence of the event.

Payment is made within three working days after the oracle publishes the data.

For more information and insights on parametric policies, please refer to the Seminar proceedings: "Parametric policies between market, technology and law"[20], held on 10 May 2024.

6.3 Policies for retail customers

Catastrophe cover can also be included in the home policy for retail customers: it is an additional cover that can be added to the basic coverage against Fire and other damage to property, upon payment of an additional premium.

Catastrophe cover can cover both the main dwelling (detached or multi-family house) or occasional dwellings as well as professional firms, guest houses and B&Bs, the latter only if they are communicating with the main dwelling.

The "earthquake" cover is usually required in order to be able to purchase, with a premium surcharge, the other covers for flood, flooding, flash floods and contents

19 PGA, or Peak Ground Acceleration, which is a measure of the maximum ground acceleration induced by the earthquake at a specific point. PGA provides a measure of the intensity of an earthquake felt at a specific location, while magnitude measures the overall intensity of a tremor. The data is processed by the Istituto Nazionale di Geofisica e Vulcanologia (National Institute of Geophysics and Volcanology), on the basis of seismograph readings, to create the level maps ("ShakeMap") of the areas affected by the earthquake. To facilitate understanding of this parameter, the policy contains an empirical table for conversion from magnitude to PGA and examples. PGA can be measured in various ways, although frequently the value is expressed in multiples of the acceleration of gravity (g).

20 https://www.ivass.it/pubblicazioni-e-statistiche/pubblicazioni/att-sem-conv/2024/05-10-parametriche/index.html

of the dwelling[21]. In most of the policies examined, the "floods" guarantees are merged and also include the "flash flood" guarantee.

Insurance cover in the event of a "landslide" is only included in the "floods" covers by three companies, while it is excluded by seven companies.

Coverage for "overflowing rivers", on the other hand, is not provided for by any policy.

The insurance can be taken out by the owner or leaseholder and also covers the appurtenances (attics, cellars, parking spaces, garages). Premises serving the dwelling containing household goods and equipment for leisure activities are sometimes included in the cover, provided they are located within 200 metres of the insured property as the crow flies.

The duration of household policies is generally one year with tacit renewal.

Direct and material damage to insured property is covered; the policies also offer a wide range of **ancillary non-insurance services**, also provided by third parties, which, with the exception of one company[22] which offers them free of charge, require the payment of an additional premium.

Ancillary services refer to: basic necessities, including for frail persons, costs of psychological assistance following the occurrence of a catastrophic event that has made the home unfit for habitation, serious injury to the insured person, serious injury or death of a family member, costs of clearing, demolition and transport to authorised dumps, costs of repair and reconstruction of the building or for reimbursement of the additional costs of adapting the building to regulations that came into force after its construction, etc.

Several policies offer **advance payments and additional indemnities**:

---

21 The Content includes: valuable items, jewellery and precious objects, including those owned by third parties, valuables and money, collections, personal documents, electronic equipment, alarm systems, furniture and furnishings, household appliances, clothing, photographic equipment, goods stored in the office and/or professional studio attached to the dwelling, bicycles and gardening equipment and supplies stored in the appurtenances of the dwelling, geothermal/solar and photovoltaic/heating systems, hoists and stairlifts, radio transmitter antennas, wall and floor coverings, tennis courts, swimming pools, as well as improvements and conversions made to the dwelling also by the insured tenant, motor vehicles covered by motor liability insurance and caravans.

22 One company offers customers who have taken out a household policy the free Caring Angel CAT-NAT service, which on the occurrence of a major natural event in the area where the insured home is located (such as a flood), offers a support service directly on the homepage of its website with an indication of a 24-hour emergency number on crisis days. The service allows for the timely initiation of claims management, entrusting the company's network with the restoration of damages incurred as a result of the catastrophic event.

- the payment, prior to the final settlement of the claim, of an advance equal to 50% of the alleged damage, provided that the latter is at least €20,000/25,000;
- in addition to the reimbursement of certain expenses, a lump sum by way of additional indemnity for the most serious cases of total destruction, unfitness for habitation or lack of stability of the insured dwelling. This amount for two companies is equal to 20% of the compensation for damage to the building.

There are typical exclusions for each catastrophe cover, which, in the case of an earthquake, are in addition to the general exclusions for fire and blasts, as well as specific limitations, deductibles (the amount of which is generally not specified in the insurance terms and conditions, where reference is made to the policy) and excesses.

The only stand-alone home insurance policies that offer catastrophe cover include exclusions that severely limit damage compensation.

6.3.1 Insurability requirements for buildings

The cover only applies if the insured dwelling falls within the definitions and types of dwelling set out in the Glossary and has specific construction characteristics and intended use. In particular, the building to be insured must:

a) not be under construction;

b) not be built without a permit or unfit for habitation;

c) be in good static and maintenance condition;

d) be intended for residential housing, offices or professional offices for at least 2/3 of the covered area[23];

e) have specific construction characteristics[24];

f) if it is an anti-seismic building, it must comply with current legal regulations[25].

Among the insurability requirements, two companies request the indication of the year in which the building was constructed or the year in which the renovation

23 The surface area is considered to include floors and basements, excluding the attic, if empty and unoccupied.

24 Depending on building material (reinforced concrete, masonry, wood (chalet), green building).

25 An anti-seismic building is a structure built in compliance with the principles defined in the Order of the President of the Council of Ministers No. 3274 of 20/03/2003 and/or in the Decree of the Ministry of Infrastructure of 14/01/2008 containing "Approval of the new technical standards for constructions" and subsequent modifications and integrations.

with earthquake retrofitting was completed; for example, a company only insures real estate built since 1995.

One company has provided that if untrue statements are made about the actual type of construction of the insured building, the deductible percentage may be doubled or tripled and the maximum indemnity amount provided may be further reduced.

6.3.2 "Earthquake" coverage

Earthquake cover is included in all catastrophe policies as a basic cover and provides compensation for material damage directly caused to the building and/or its contents[26].

In one case, the cover is activated if the magnitude of the earthquake exceeds a certain threshold[27]; for another, the magnitude of the earthquake affects the commencement of the insurance cover[28].

In the event of an earthquake, companies shall reimburse, with indemnity limits:

1. the necessary expenses for demolishing, clearing, treating and transporting to the nearest suitable landfill site the residues of the indemnifiable claim, including those falling under the "toxic and noxious" category, pursuant to Legislative Decree No. 22/1997;

2. the costs of alternative accommodation if the building is declared unfit for habitation by the authorities;

3. the increased costs of adapting the building to regulations that may have come into force after its construction;

4. the costs of redoing personal documents and fixed archives.

For buildings located in the so-called "red zone", a company compensates the value as new of the insured building without applying the deterioration of use, if reconstruction or repair is impossible within 24 months of the date of the earthquake.

---

26 All the policies also provide that the tremors recorded in the 72 hours following the first event that gave rise to a claim eligible for indemnification are attributed to the same telluric episode and the related damages are considered as a single claim.

27 The guarantee covers earthquake damage "*... only if the earthquake is of Richter magnitude (or local ML magnitude) equal to or greater than 4.0 located by the National Seismic Network of the National Institute of Geophysics and Volcanology (INGV) in relation to the epicentre of the earthquake*".

28 The policy provides that "*limited to the case in which an earthquake of a magnitude equal to or greater than 3.5 on the Richter Scale recorded by the national seismic network of the INGV in the 30 days prior to midnight of the effective date of the contract has occurred in the province of the municipality where the Risk is located, the cover is provided for Claims occurring 60 days from the commencement of the Insurance*".

If the building is earthquake-resistant[29] this must be stated in the policy.

6.3.2.1 Exclusions and limitations

Without prejudice to the common exclusions provided for the Fire and Damage to Property covers, and in addition to the exclusions already indicated in the paragraphs concerning policies dedicated to SMEs, in these policies, damage caused by the following is expressly excluded from the earthquake cover:

a) flooding;

b) extortion;

c) buildings and canopies not compliant with the technical standards of the law and any local regulations on construction in seismic zones in force on the date of their construction;

d) air-supported structures, marquees and tensile structures;

e) buildings and canopies under construction or undergoing extension or renovation;

f) dwellings owned by associations, companies, enterprises, institutions and public bodies;

g) vehicles subject to registration.

Earthquake cover is provided with indemnity limits that differ from policy to policy, per claim and per insurance year, decided at the time the policy is taken out by the policyholder, with regard to both the dwelling and its contents. For example, cover may be provided for the dwelling, up to 70% or 100% of the sum insured for damage to property, and for the contents, up to 100% of the same sum. A company will indemnify damage to the building and contents in excess of about 10% of the sum insured and up to a maximum of 80% of the sum insured net of deductible.

6.3.3 "Flood" coverage

In addition to the earthquake guarantee, flood coverage can be purchased for an additional premium.

---

29 An anti-seismic building is a structure built in compliance with the principles defined in the Order of the President of the Council of Ministers No. 3274 of 20/03/2003 and/or in the Decree of the Ministry of Infrastructure of 14/01/2008 containing "Approval of the new technical standards for constructions" and subsequent modifications and integrations.

These guarantees are provided by all the companies examined in a single insurance cover: two companies also include flooding and flash floods, which are provided as stand-alone cover in other retail policies.

The insurance shall cover material and direct damage to the building and its contents – including fire, explosion and blasts – caused by the leakage of water, and what it carries, from the usual banks of watercourses or reservoirs, even if caused by an earthquake, landslide or land subsidence.

The following are included in the cover:

- material damage directly caused to electrical and electronic insured property by short circuits, current fluctuations or overvoltage, provided that such events result from floods;
- damage caused by earth and/or mud carried by water spilled from the banks.

It should be noted that three companies make insurance cover conditional on the fact that the event must be characterised by violence that can be seen on a plurality of things, insured or not, possibly located in the vicinity of the insured property.

One company states in its glossary that damage caused by floods is considered part of a single claim if it occurred within 168 hours of the same event giving rise to the indemnifiable loss.

Most companies reimburse, with indemnity limits, expenses for: demolishing and clearing the residue of the claim; renting alternative accommodation; removing and disposing of and transport the residues of the accident; redoing personal documents that were destroyed.

6.3.3.1 Exclusions and limitations

In addition to the exclusions set forth in the preceding paragraphs, specific exclusions include damage caused by:

a) looting;

b) overflow and backflow of sewers, unless such events are related to the direct effect of the flood;

c) formation of streams or external accumulation of water.

Damage to the following is also excluded:

d) things that by volume and weight can be easily moved;

e) indirect damage, such as changes in construction, lack of lease, non-enjoyment or commercial or industrial income, suspension of work or any damage that does not concern the materiality of the insured property;

f) to buildings constructed in gully areas.

All policies provide for deductibles or excesses, which are often indicated in the policy sheets and not in the general insurance conditions. Limitations are also provided for in the indemnifiable amounts per insurance year and in the costs of emergency interventions.

With regard to damage to basements and cellars and the things contained therein, the percentage of indemnity may be reduced by up to 50%.

6.3.4 Flooding and flash flood coverage

Most policies include "flooding and flash flood" coverage; in some cases, this additional cover is included in the flood cover.

6.3.4.1 Exclusions and limitations

There are no specific exclusions other than those indicated in the preceding paragraphs.

This cover is also subject to limitations on the indemnifiable amounts in the event of a claim, and to deductibles and excesses.

It should be noted that some policies provide for reduced deductibles for premises in basements and cellars.

7. Conclusions

On the Italian market, the offer of policies covering risks arising from natural disasters is normally combined with "fire and damage to property" and is heterogeneous and varied.

The analysis revealed some food for thought:

a) the definition of natural disasters should be broad and unambiguous;

b) it would be useful to provide for a clear definition of *"building violations and construction without the required permits"*, also in order to avoid undesirable surprises for the insured party when assessing the damage and/or any actions for recourse;

c) complex underwriting questionnaires to be filled in by the policyholder should be avoided; moreover, the effectiveness of the policy should not be tied to statements by the insured about the construction characteristics of the building of which the insured may be unaware;

d) solutions should be explored, including, for example, the recognition of an advance on the indemnity, which would allow the insured party to meet the costs of emergency initiatives necessary for safety, damage limitation, and the use of usable property;

e) it would be useful to identify an immediate and unambiguous method of valuing assets while also simplifying the claim settlement process (e.g. with "first absolute risk" covers);

f) *partial* settlement of damages: rather than formulating a criterion, it is important that the latter is clearly defined;

g) exclusions should be well calibrated and designed in a manner consistent with the individual risk;

h) companies could provide more advantageous insurance and premium conditions to reward and encourage virtuous behaviour on the part of policyholders aimed at mitigating or promoting climate change adaptation[30].

30 See EIOPA IMPACT UNDERWRITING Report on the Implementation of Climate-Related Adaptation Measures in Non-Life Underwriting Practices https://www.eiopa.europa.eu/publications/impact-underwriting-report-implementation-climate-related-adaptation-measures-non-life-underwriting_en

Appendix 1.
Analysis of definitions and glossaries

- **Earthquake**: the definition is not always found in glossaries, but in other parts of the contract texts in which the covers are described. It is generally defined as an *"abrupt and sudden upheaval of the earth's crust due to endogenous causes"*; sometimes accompanied by an indication of the degrees of the Richter Scale[31]. In all the policies it is also stated that *"the tremors recorded in the 72 hours following the first event that gave rise to a claim eligible for indemnification are attributed to the same telluric episode and the related damages are therefore considered as a single claim..."*. Some companies include certain conditions in the definition: e.g. *"provided that the insured building is located in an area identified among those affected by the earthquake in the measures adopted by the competent authorities, when that event is characterised by a violence that can be observed on several buildings, insured or not, located in the vicinity"*.

- **Floods**: leakage of water, and what it carries, from the usual banks of watercourses or natural or artificial reservoirs, even if caused by earthquake, landslide or land subsidence, when this event is characterised by violence that can be seen on a plurality of entities, whether insured or not, located in the vicinity.

- **Landslide**: natural downward displacement, more or less rapid, of large masses of earthy and rocky materials; the cavity produced by this displacement on the detachment surface and the heap of material downstream.

- "**Overflowing rivers**": the definition was not found in any glossary as no company provides coverage.

- **Flooding[32] and Flash Floods**: rapid flooding caused by excessive rainfall in a short period of time due to the inability of the soil to drain and/or absorb water. Damage caused by soil and/or mud carried by water is also included.

---

31 One company sets the minimum threshold at 3.5° on the Richter Scale for all policies offered, another at 4°. The first company also offers a policy for businesses in the accommodation sector that insures the ascertained loss of revenue resulting from the cancellation of bookings received, as a consequence of an earthquake recorded by the INGV with a local magnitude (ML Richter Scale) of no less than 5 degrees, whose epicentre was located within a radius of 20 km from the municipality where the insured accommodation facility is located (distances are calculated based on the geographical coordinates of the municipality - Source: ISTAT).

32 In some policies, only "flooding" is defined as the presence of water accumulated in a normally dry place as a result of the formation of streams or external accumulation of water, spillage of water, due to atmospheric precipitation and not due to breakage from water, sanitary and technical installations.