NAT CAT



Important insurance issues for involved Parties: the different legal/insurance environment in the various European Countries for the NAT CAT response

Natural Catastrophe global overview

In January – June 2022, natural disasters caused losses for **US\$ 65bn**, with slightly more than half of these insured.

The natural disasters for the first half of this year are mainly related to weather-related catastrophes:

- extreme tornadoes in US, once again the country with highest weather-related losses (US\$ 28bn of which US\$ 19bn are insured losses);
- Australia were submerged by floods (US\$ 6.6bn of which US\$ 3.7bn are insured losses);
- Southern Europe was struggled with extreme heat, wildfires and drought in addition to winter storms and hurricanes (overall losses of US\$ 5.2bn).

Fortunately, the first half of 2022 saw lower natural disaster losses than 2021 (same semester), i.e.

US\$ 65bn (2022) compared with US\$ 105bn (2021)

It is important to say that the effects of climate change are evident in increasingly extreme weather events, such as the unprecedented floods in Australia, which set the new record for insured flood losses at close to USD 3.5 billion, the costliest natural catastrophe for the insurance industry in the first half of 2022.

The main environmental disasters caused by man, and their causes

According to the Global Risks Report of 2020, in the last 20 years, 90% of the natural disasters on earth were caused by extreme weather events, such as floods, storms, heat waves.

However, it is important to highlight that also the human activity can be considered the cause of hundreds of environmental disasters in the last two centuries, disasters that would occur much more sporadically without the human intervention. Some of the causes are:

- Overpopulation
- Pollution
- Exploitation of fish resources
- Destruction of habitats
- Industrials processes

- Deforestation;
- Genetic and chemicals modification
- Global warming and ocean acidification
- Climate changing

According to a report published by UNDRR (United Nations Office for Disaster Risk Reduction), between 1998 and 2017 the economic losses caused by environmental and climatic disasters increased by 151% compared to the previous two decades, from \$ 1,313 billion to \$ 2,908 billion.

Therefore, the awareness and evidence of these phenomena is crucial to develop and implement preventive actions appropriate to contain costs and protect nature and humans.

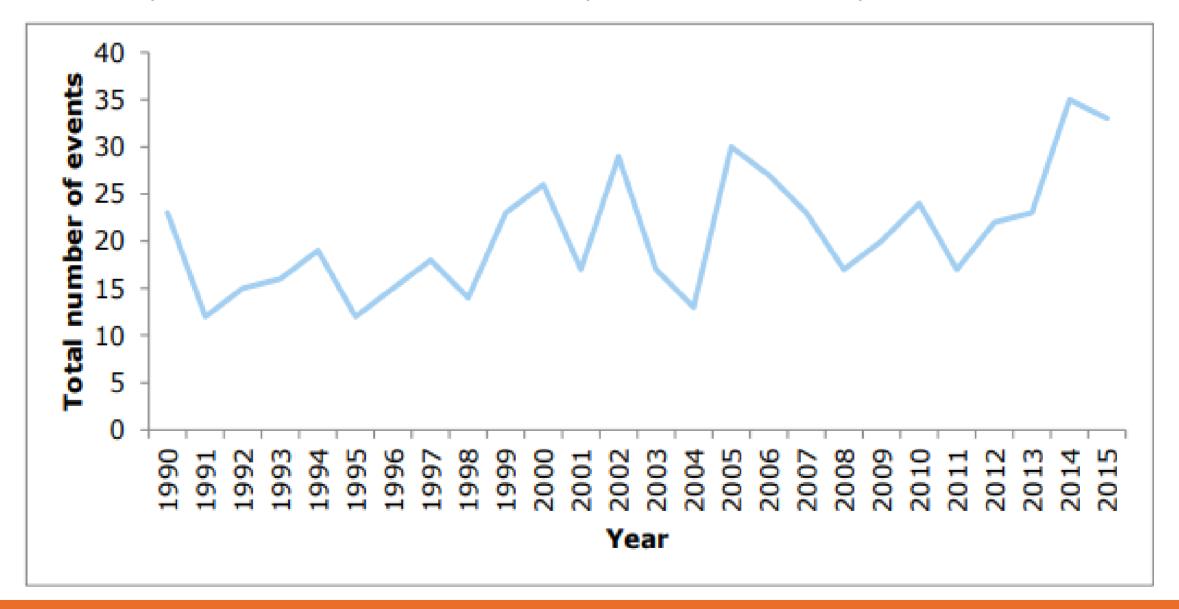
The main man-made environmental disasters of the last 20 years

- January 2000, cyanide spill in Baia Mare, Romania; uro a Baia Mare, Romania;
- 2002, pollution due to the intensification of dairy farming, New Zealand;
- November 2005, explosions at the Jilin City petrochemical plant in China;
- February 2006, landslide in Leyte, Philippines;
- December 2008, coal ash spill at the Fossil Plant in USA;
- April 2010, British Petroleum Oil Spill explosion, Gulf of Mexico;
- March 2011, nuclear accident at the Fukushima power plant, Japan;
- 2015/2016, the 'end' of the Great Barrier Reef, Australia;
- May 2017, flooding of the Uruguay River Basin, Uruguay;
- January 2019, the Brumadinho Dam disaster, Brazil;

- November 2019, high water in Venice, Italy;
- ➤ 2019, Amazon forest fires, Amazon rainforest;
- May 2020, diesel fuel and lubricants spill into the Ambarnaya River, Siberia;
- July 2020, fuel oil spill from cargo ship, Mauritius;
- June 2021, extreme heat in Canada;
- July 2021, floods in Germany and Belgium;
- On-going, electronic waste storage in Guiyu, China;
- On-going, the slow death of Lake Victoria, Africa;

TOTAL MONETARY LOSSES

Aggregated number of disastrous extreme weather events across main 12 EU Countries. Observed impacts from natural disaster databases (EM-DAT, NatCatService and Sigma) from **1990 to 2015**. The graphic presents the dataset ensemble average number of reported extreme weather events and indicates an upward movement in the number of reported events over the period studied.



LEGAL/INSURANCE ENVIROMENT IN THE VARIOUS EUROPEAN COUNTRIES

FOR THE NAT CAT RESPONSE

Figure 1 - Summary of purchase requirements: private property (left) and agriculture (right)

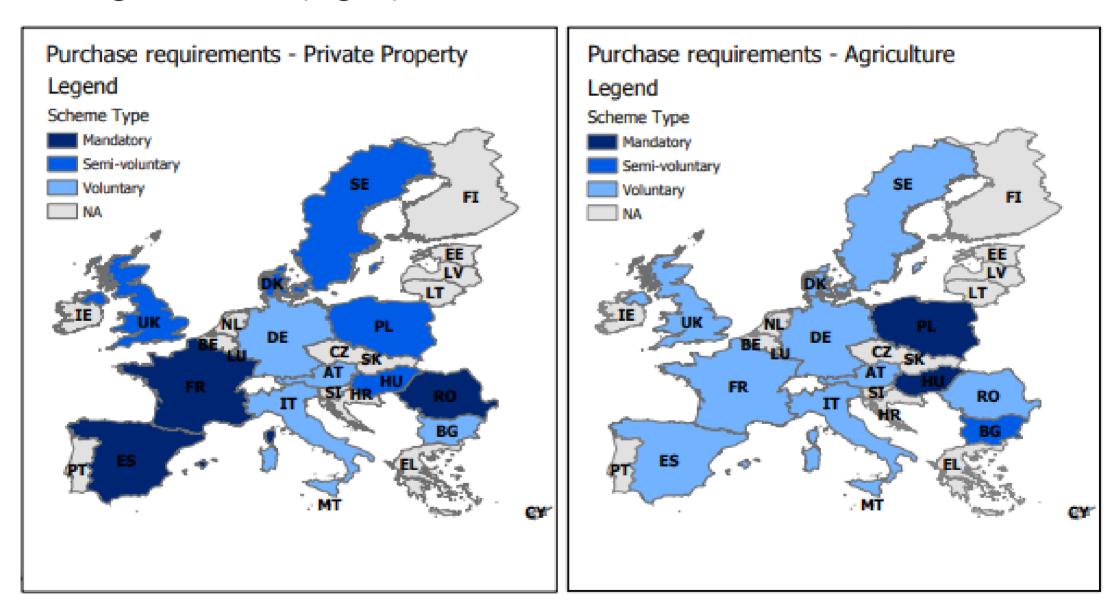
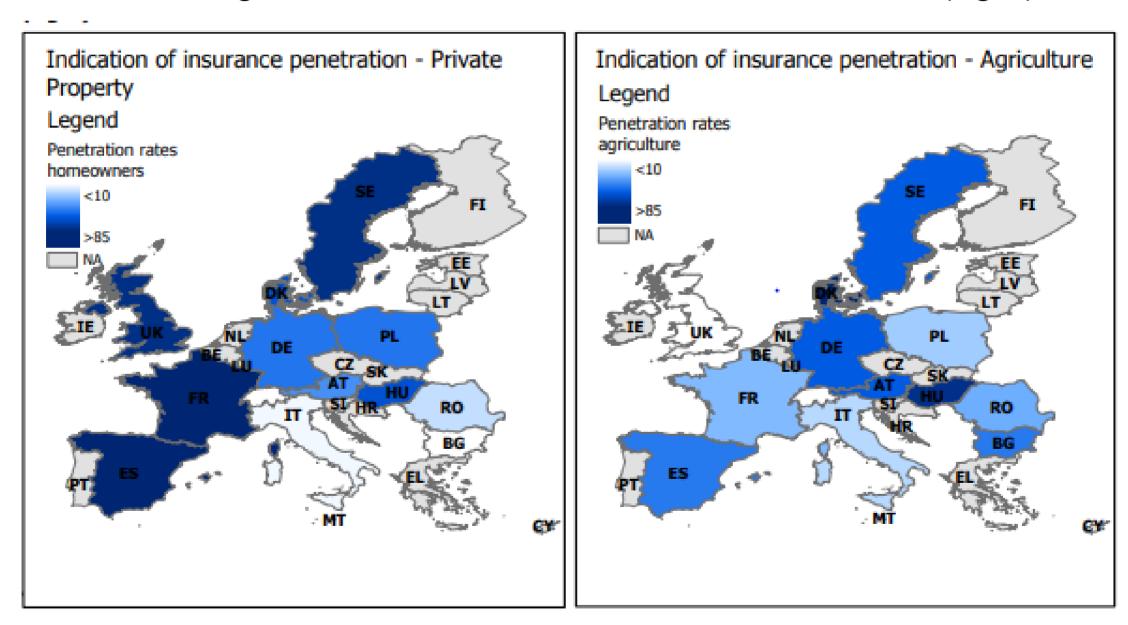


Figure 2 - The average insurance penetration rates across extreme weather events for private property (left); the percentage of arable land that is insured against at least one extreme weather event (right)



ITALY

Almost 80% of the buildings are exposed to medium-high earthquake or flood risk.

Italy is among the most affected countries in the world and has the largest protection gap of all European countries.





Legal/Insurance Environment for the NAT CAT response

- no coverage against CAT is compulsory at all;
- no routine protocol of compensation is stated;
- in 2005 the Insurance Loss Adjusters body signed a M.o.U. with the Council of Ministers (civil protection department), with the purpose of share knowhow, technic skills, economics, concepts, and facts, to experience and test a model of common intervention, should a CAT-law become effective one day.
- In the **general property** insurance, *Natural Disaster Coverage* is a voluntary extension of Policyholders insurance. The overall penetration rate is quite low due to low-risk perception and ad-hoc compensation.
- > The majority of policies cover losses such as storms and hail, while flood insurance policies are less common.
- In the corporate field, the penetration is higher than in the domestic.
- Since 1970, <u>agricultural risk</u> management has been coordinated by the National Solidarity Fund (managed by the Ministry of Agriculture). NSF has both ex-post and ex-ante roles. The ex-post role is to provide direct compensation, while its ex-ante role is to support insurance coverage or provide support for risk reduction.

SPAIN

Legal/Insurance Environment for the NAT CAT response

There is an organization called **Consorcio De Compensación de Seguros**, a state-owned enterprise, entrusted in the Ministry of Economy and Competitiveness, established in 1954.

- CCS owns assets/resources, different from those of the State and when performing insurance functions, the same is subject to private Law;
- It is headed by a Board of Directors composed of an equal number of members from the civil service and from the insurance market;
- In the scope of its insurance duties, CCS is subject to the same legal obligations as a private company. CCS has an unlimited State guarantee, although the guarantee has never been called in its whole history;



SPAIN

Legal/Insurance Environment for the NAT CAT response

- The "extraordinary risk" coverage (including terrorism risk as well) must be compulsorily included in all the policies issued by private companies in property (some exceptions), life and accidents lines. Depending on these lines of insurance, direct material damages, business interruption, death and permanent or temporary disabilities are compensated by this system. Personal damages are compensated even when the trigger event takes place abroad.
- CCS assumes the coverage in case the extraordinary risk is not explicitly assumed by the private company which issued the base policy
- ➤ To finance the "extraordinary risk" coverage, a compulsory surcharge is applied on the amount insured of every policy in the aforementioned lines of insurance. This surcharge, which tariff only varies depending on the type of exposure (dwellings, offices, shops, factories, docks, cars, etc., as well as persons), is collected by the companies together with their premiums and then reimbursed to the CCS in a monthly bases

FRANCE

Legal/Insurance Environment for the NAT CAT response

There is an organization, since 1982, called **Caisse Centrale de Reinsurance** which is the main reinsurer of the Natural Disaster scheme.

Wholly-owned by the French State, CCR has been authorized to reinsure the risks of natural disaster; it benefits from the guarantee of the State by means of an agreement signed with the Public Authorities, giving the group capital capacity to absorb natural disaster losses of up to €4.9 billion on a market-wide basis.

As a public reinsurer, CCR is mandated to operate in the public interest. As such, CCR provides insurers operating in France with coverage of exceptional risks.

CCR is responsible for the accounting and financial management of public funds on behalf of the State.



FRANCE

- Financing of the system Policyholders who take out a fire insurance policy must sign a guarantee clause against natural disasters. The premium for the guarantee for damages from natural disasters is fixed and expressed as a <u>percentage of the premium</u> relating to the basic fire policy. The percentage varies according to the insured property, subject of the fire policy, as follows:
 - > 12% for properties and their contents,
 - 12% for business interruption damages,
 - 6% for land vehicles.
- Role of the State Reinsurer of last resort, it provides unlimited guarantee to the CCR which offers the private market a fixed rate of reduced reinsurance and / or in excess of the risks from natural catastrophe (reinsurance treaty reduced in share up to 50% and an instrument unlimited stop-loss starting from a level of 200%)
- The Act of 13 July 1982 did not enumerate the perils covered, nor did it specify the hazards excluded. Article 1 of the Act merely describes what is to be understood as the effects of a natural disaster, namely: "direct uninsurable material damage whose immediate cause is the abnormal intensity of a natural event". In practice, the perils currently deemed to fall within the scope of the system are: Flooding, Mudslides, Earthquakes, Ground movement (including subsidence due to drought), Cave-ins due to underground voids or sinkholes (not due to mining), Storm surges, Avalanches, High wind damage [wind speeds higher than 145 Km/h (10-minute average) or 215 Km/h (gusting)]