

# Towards a European system for natural catastrophe risk management

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ESM/SUERF/Bruegel Workshop

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Source: Adobe Stock

# Introduction

**Historically, only about a quarter of losses incurred from natural catastrophes in the EU were insured**

**This insurance protection gap is expected to widen due to the increasing severity and frequency of natural disasters caused by climate change**

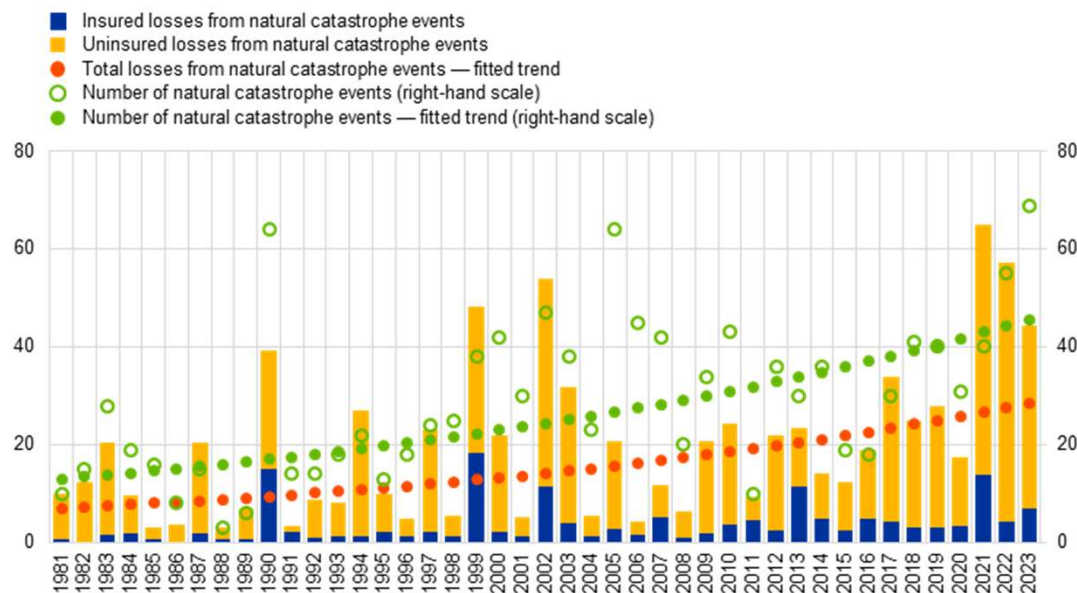
**The gap has implications for the macroeconomy and financial stability**

- In 2023, the ECB and EIOPA presented policy options to reduce the gap, based on a 'ladder of intervention'
- Since then, more devastating catastrophes have underlined the importance and urgency of solutions

**EIOPA and the ECB propose a possible European approach to reduce the impact of natural catastrophes, building on existing national and EU structures**

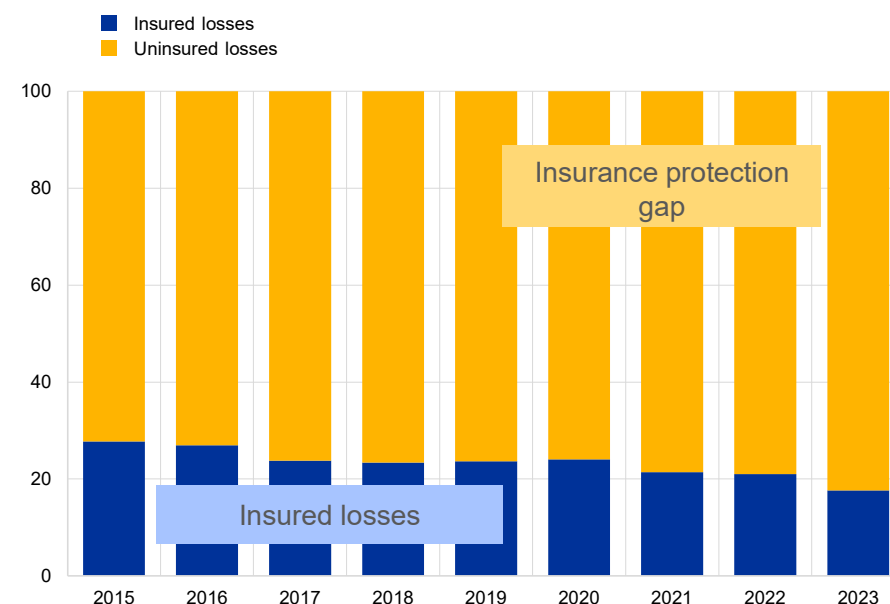
# The growing challenge of insuring natural catastrophes in the EU

## Rising natural catastrophe events and economic losses



Sources: CATDAT (Risklayer GmbH - Europe Climate related impact Analysis Project), EIOPA's [Dashboard on insurance protection gap for natural catastrophes - European Union \(europa.eu\)](#) and EM-DAT.

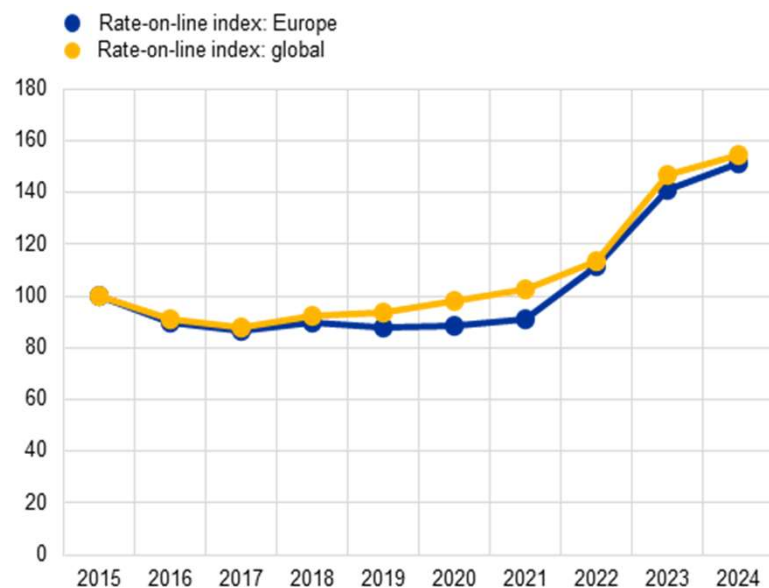
## The share of insured and uninsured losses in total losses caused by natural catastrophes in the EU (percentage, 10-years moving average)



Sources: CATDAT (Risklayer GmbH - Europe Climate related impact Analysis Project), EIOPA's [Dashboard on insurance protection gap for natural catastrophes - European Union \(europa.eu\)](#).

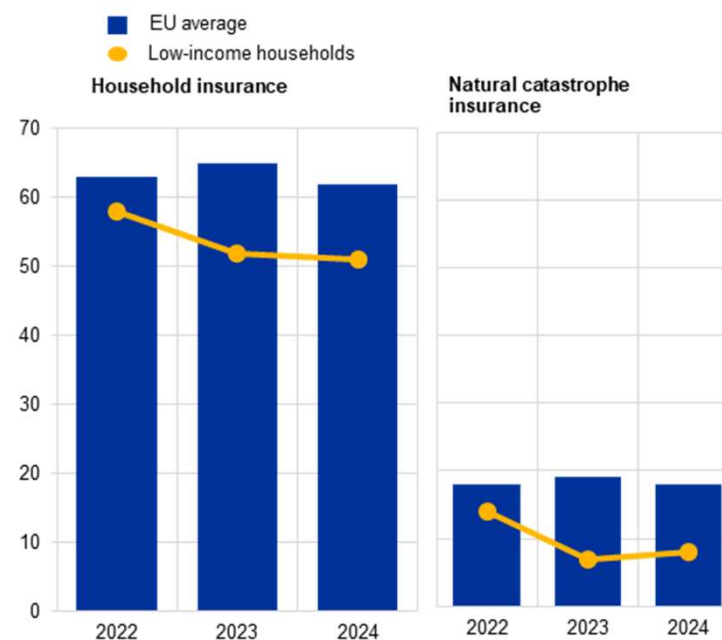
# Multi-faceted issue involving supply and demand

## Rising reinsurance costs (index normalised to 100 in 2015)



Notes: 'Rate-On-Line' (ROL) refers to the rate of reinsurance premium to loss recoverable in a reinsurance contract. Source: [Guy Carpenter Regional Property Catastrophe Rate-On-Line Index \(artemis.bm\)](https://artemis.bm).

## Household and natural catastrophe insurance coverages (2022-2024, percentages)



Source: EIOPA 2022-2024 Eurobarometer analysis.

# The insurance protection gap reveals a market failure

→ Individual insurers and consumers do not factor in broader economic benefits of insurance

- Faster recovery after disasters
- Less burden on fiscal budgets
- Reduced costs through better risk management

→ **Moral hazard** (expectation that governments cover losses)

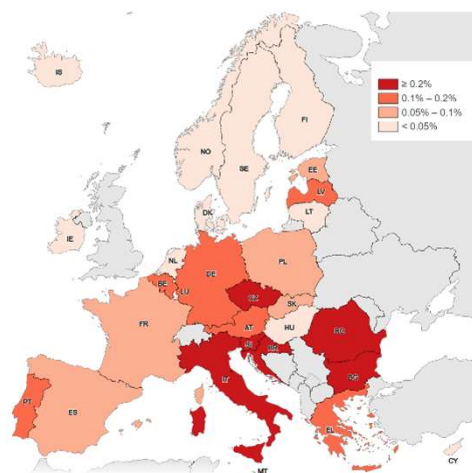
+ Rising risks lead to increasing public involvement

➤ **Lessons from national insurance schemes**

➤ **Possible EU-level approach**

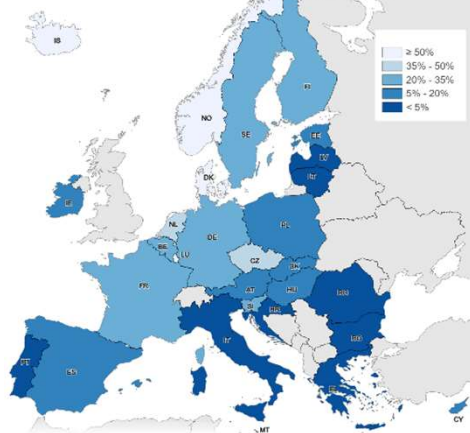
# National (re)insurance schemes help improve insurance coverage

Average annual economic losses from five natural perils scaled by GDP across EEA countries (1980-2023; percentages)



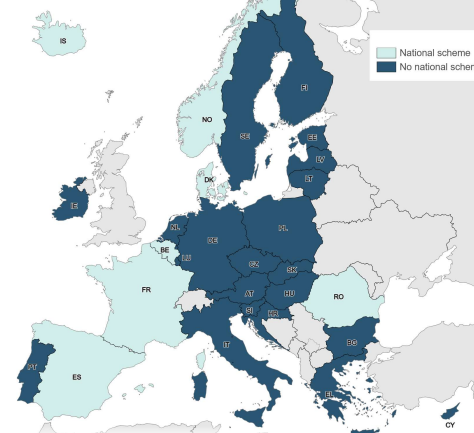
Share of insured economic losses related to natural catastrophes across EEA countries (1980-2023; percentages)

Average insured share: ~ 25%



EEA countries with a national insurance scheme for natural catastrophes (schemes in place as of 2024)

Average insured share : ~50%



Notes: Left panel: The five natural perils are coastal floods, earthquakes, floods, wildfires and windstorms.

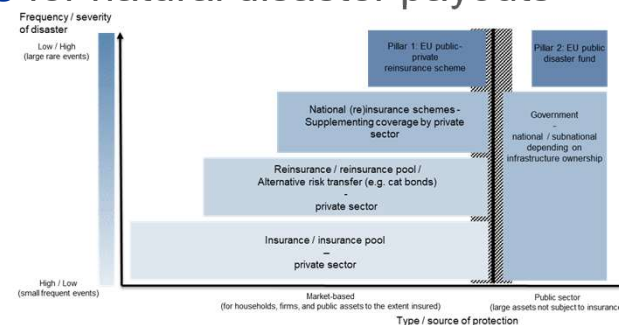
Sources: Left panel: CATDAT (Risklayer GmbH - Europe Climate related impact Analysis Project), EIOPA's [Dashboard on insurance protection gap for natural catastrophes - European Union \(europa.eu\)](#) and Eurostat. Middle panel: [EIOPA dashboard on insurance protection gap for natural catastrophes](#), European Environment Agency CATDAT; Right panel: EIOPA and OECD (2021).



# Possible EU-level approach

## Objectives:

- **Clarify private and public responsibilities** and ensures complementarity of actions taken
  - Encourage **ex ante risk mitigation**
  - Ensure **efficient use of private and public sector funds** for natural disaster payouts
    - Reduce **moral hazard**
    - Improve **insurance coverage**
    - **Limit public costs** after natural catastrophes
- Two-pillars aimed at (i) pooling private risks to increase insurance coverage and (ii) strengthening EU public disaster risk management, supplementing national and EU-level initiatives



# EU public-private reinsurance scheme

## Pillar 1: EU reinsurance scheme

Increase insurance coverage and supply	Goal
(Re)insurers and national schemes	Participants
Public-private	Set-up
Voluntary	Membership
Risk-based premia from participants (and capital market funding incl. cat bonds)	Funding
Payout according to contract conditions	Payouts

## Design builds on 5 lessons from national insurance schemes:

1. Broad scope (multiple perils, assets, geography)
  - greater risk pooling & diversification opportunities
2. Public-private reinsurance scheme
  - complements private (re)insurers and national schemes
3. Risk-based premiums
  - no cross-subsidisation, while balancing risk mitigation, affordability
4. Financing through premiums and capital markets
  - not necessarily dependent on public financing
5. Initiatives supporting risk mitigation and adaptation
  - open-source tools, models, data to enhance risk assessment



# EU public disaster financing

## Key design features:

1. Builds on EU's current approach for post-disaster relief
  - currently EU Solidarity Fund (pure solidarity, limited size)
2. Risk-adjusted contributions
  - incentivise risk mitigation, while allowing for solidarity
  - pre-agreed national adaptation and resilience plans
3. Mandatory for all EU Member States
  - to maximise effectiveness in terms of risk sharing
4. For reconstruction of eligible public assets
  - assets not covered by private insurance
  - investment in resilient infrastructure
5. Sufficient "skin in the game"
  - payouts meaningful but not above a certain share of national losses

## Pillar 2: EU disaster fund

Goal	Incentivise risk mitigation and limit public outlays
Participants	Governments
Set-up	Public
Membership	Mandatory
Funding	Risk-adjusted contributions from governments (and possibly debt issuance)
Payouts	Payout calibrated to event and dependent on implementation of national plans

## Policy and legal considerations

Proposal acknowledges political and legal realities:

- 1) It requires a **decision at political level** with involvement of all relevant decision-makers, notably Member States.
- 2) It is designed to **supplement and reinforce** existing national and EU initiatives.
- 3) It would be in compliance with **Treaty on the Functioning of the European Union**.

Thank you



Source: Adobe Stock