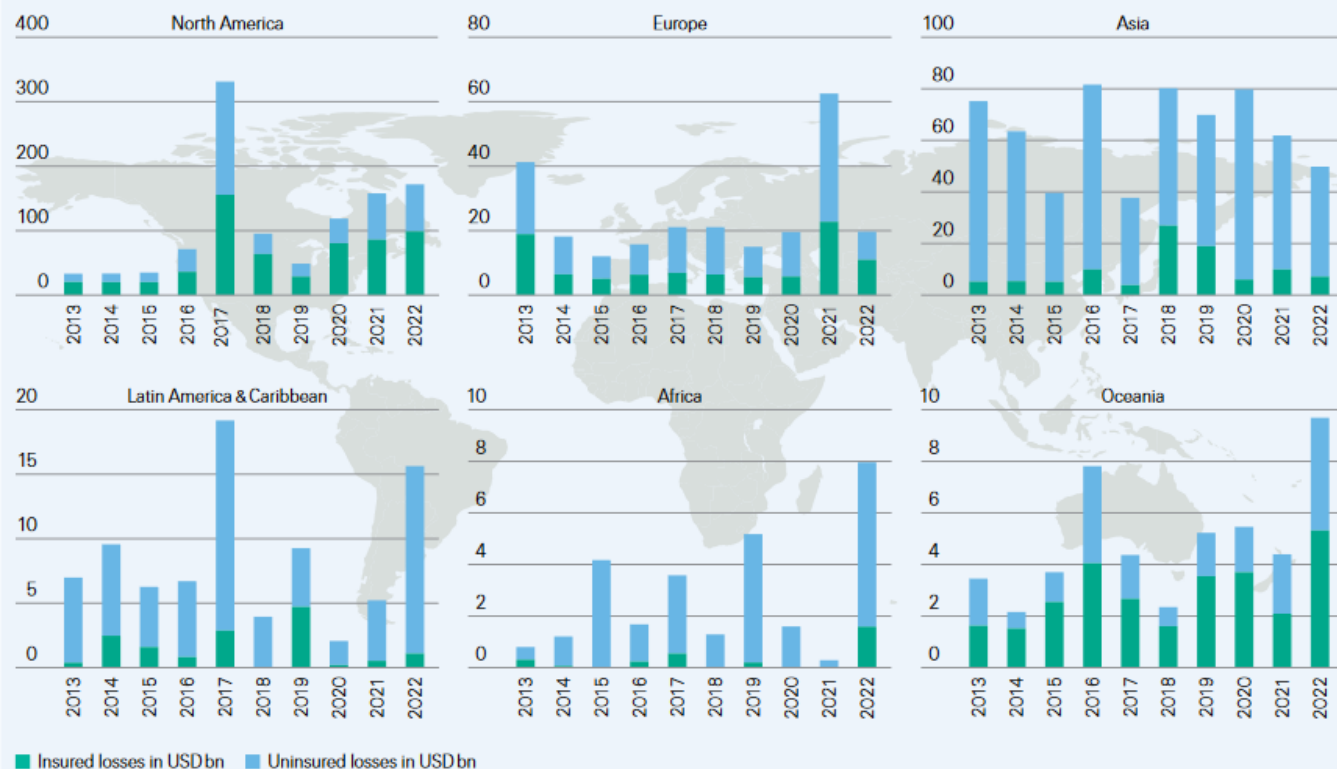


Nat-cat protection gap around the world

Figure 24

Natural catastrophes protection gap by region 2013–2022, in USD billion at 2022 prices



Source: Swiss Re Institute

>60%

of economic losses
caused by natural
catastrophes over the
past decade were
uninsured

Source: sigma 1/2023, Swiss Re Institute

Catastrophic events impact all countries and their economies

Regional loss overview

Insured and economic losses were highest in North America, driven by Hurricane Ian

Table

Number of events, victims, economic and insured losses by region, 2022

Regions	Number	Victims	in %	Insured losses (USD bn)	in %	Economic losses (USD bn)	in %
North America	84	5 10	1.5%	102.8	77.6%	176.0	62.1%
Latin America & Caribbean	20	906	2.6%	1.9	1.5%	17.4	6.1%
Europe	37	23 864	67.9%	12.2	9.2%	21.0	7.4%
Africa	43	3 044	8.7%	1.6	1.2%	8.0	2.8%
Asia	92	6 804	19.4%	8.4	6.3%	51.2	18.1%
Oceania / Australia	7	29	0.1%	5.3	4.0%	9.7	3.4%
Space	2			0.3	0.2%	0.3	0.1%
World total	285	35 157	100.0%	132.5	100.0%	283.7	100.0%

Note: Some percentages may not add up to 100 due to rounding.

Source: sigma 1/2023, Swiss Re Institute

”

Major natural catastrophes have large and significant negative effects on economic activity... However, it is mainly the **uninsured losses** that drive the subsequent **macro-economic cost**, whereas sufficiently insured events are inconsequential in terms of foregone output.



Bank for International Settlement

Working Paper No. 394

December 2012

The public sector bears a large portion of the risks: Public budgets are put under twofold strain



Higher costs

- Emergency response costs
- Reconstruction of public property & infrastructure
- Support for non-insured households
- Cost of replacements (e.g., higher imports)

- Lower tax income
- Lower tourism income
- Lower export revenues
- Loss of investor confidence
- Lower revenues**



Closing the financing gap between insured and uninsured losses is thus in the public sector's **vital interest**.

For governments insurance can help save lives, speed up recovery and provide economic stability

Governments are exposed to significant risks....
and only a small portion of catastrophe risks is insured



Geopolitical



Economic



Environmental



Social



Technology

>60%

of economic losses
caused by natural
catastrophes over the
past decade were
uninsured



Failure to prepare
for catastrophic
events can have a
long-term effect on
a country's
economy



Swiss Re's **Public Sector Solutions** team works with governments at all levels to improve resilience and transfer risk



With our **global footprint**, we provide tailored support for the **specific needs** of our public sector clients



Always at the forefront, we are a **pioneer in emerging and industrialized markets**

Parametric insurance is an innovative risk transfer tool for the public sector

Parametric insurance relies on the **measurement** of a natural phenomenon or index, such as:



Earthquake magnitude/intensity



River flooding



Excess/lack of rainfall



Heat/cold waves

Payout of pre-defined amount is made when contractually agreed **threshold** of parameter/index is **exceeded** (e.g., intensity of earthquake or amount of rainfall).



Fast payout (2-6 weeks)



Otherwise **uninsurable** risks can be insured (e.g., emergency costs, loss of revenues)



No loss **assessment** required



Flexibility in the use of funds



Transparency to both insurer and insured



Avoids **adverse risk** selection



Challenges to be addressed

- **Basis risk** (insurance payout may deviate from actual loss)
- Need of objective and accurately measured **data**, required both to price and observe the index

Parametric Insurance: recover faster

Parametric insurance



Indemnity based insurance

