

Towards a Comprehensive Approach to Building Economic Resilience to Extreme Events and Climate Change

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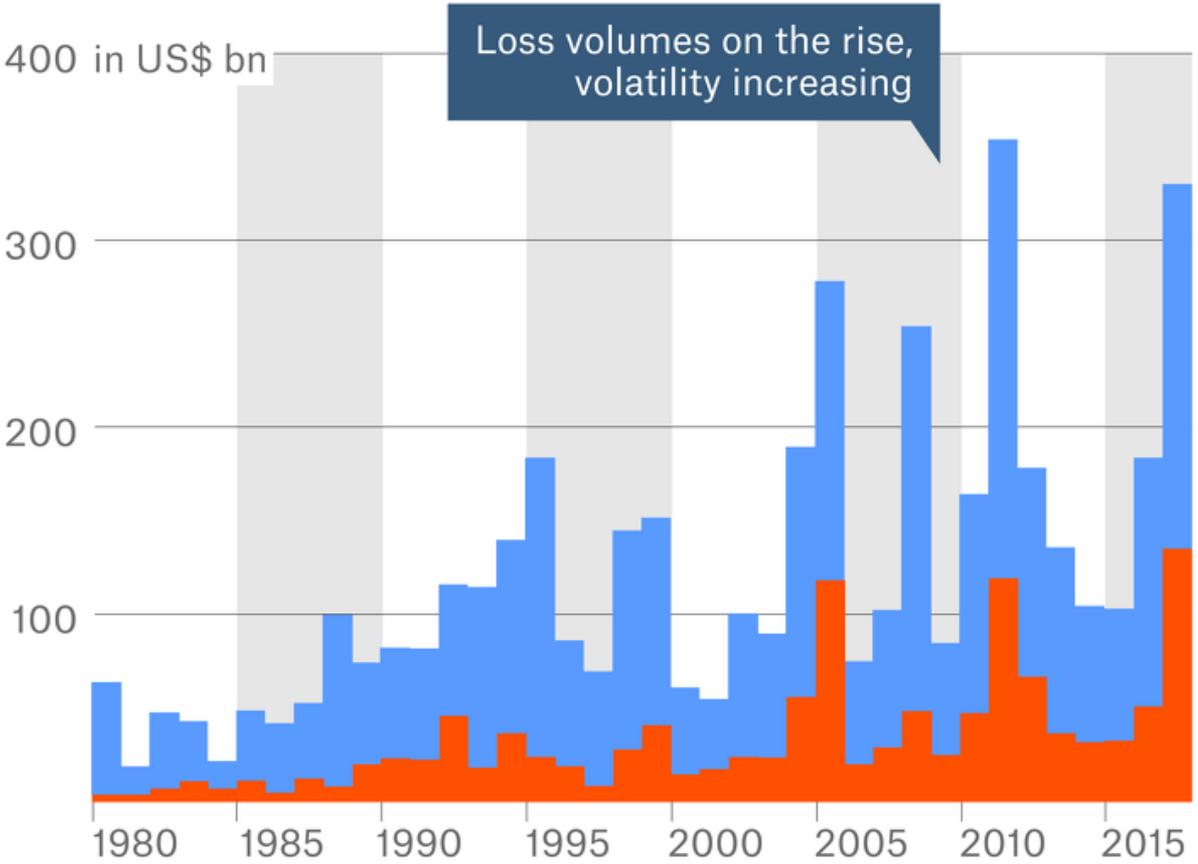
- \ Trends in disaster losses and how disasters impact governments, people, businesses and economic sectors**
- \ Global Movement for building economic resilience to disasters**
- \ How can market-based insurance help with building economic resilience?**
- \ National regulatory barriers that are hindering access to the global insurance and reinsurance markets**

**Trends in disaster losses and how
disaster impact governments, people,
businesses and economic sectors**



Overall and insured losses 1980-2017

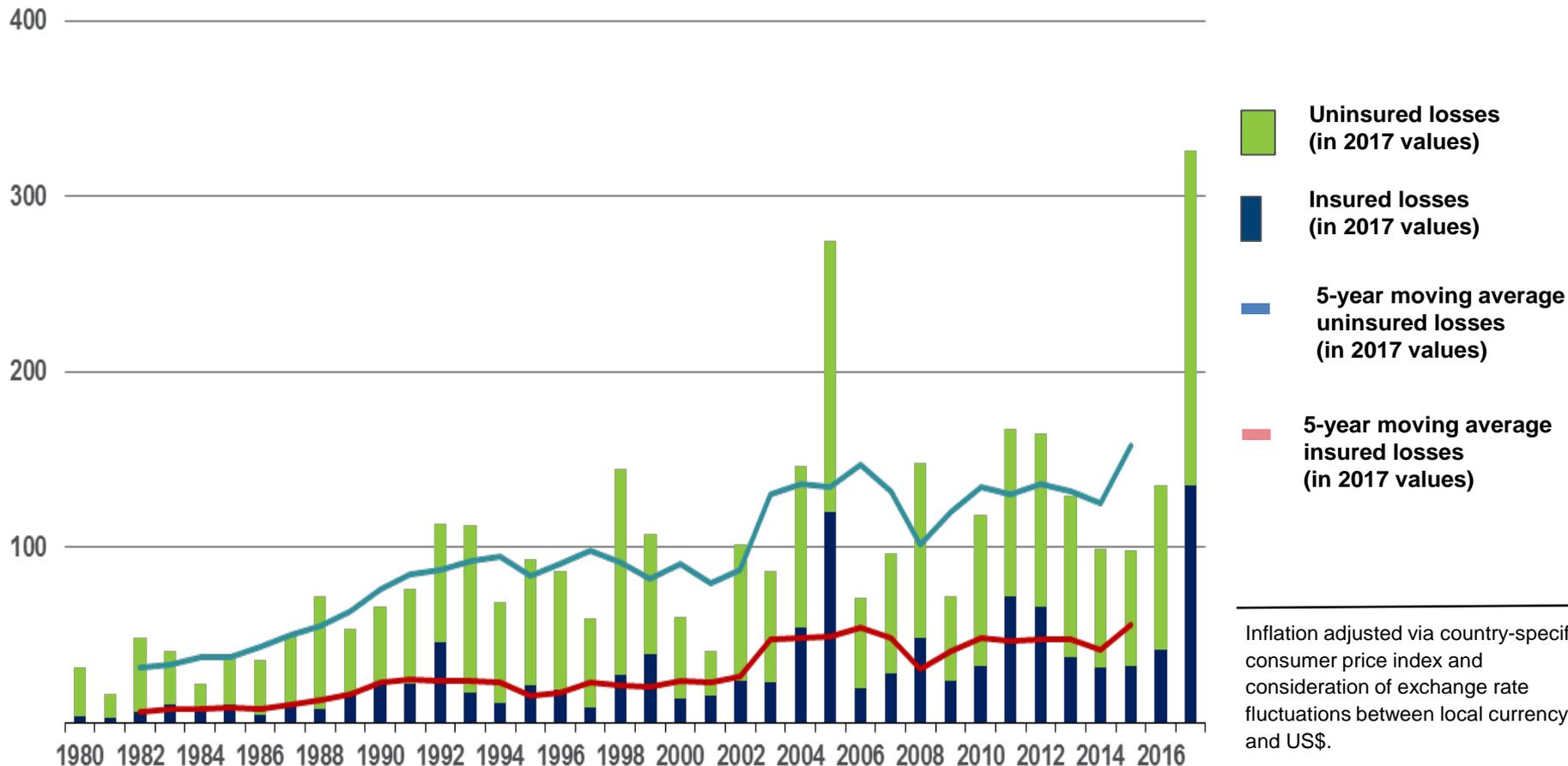
■ Overall losses (in 2016 values)
■ Of which insured losses



- ✓ overall losses in 2017 were US\$ 330bn, far greater than those in the extreme years of 2005 and 2008.
- ✓ 2011 was the record year for recorded losses at US\$ 350bn, due mainly to the Tohoku earthquake and floods in Thailand.
- ✓ Insured losses in 2017 were US\$ 135bn, the highest figure in the period from 1980 to 2017.

Uninsured and insured losses with 5-year moving average

US\$ bn



Inflation adjusted via country-specific consumer price index and consideration of exchange rate fluctuations between local currency and US\$.

\ Increasing exposure and vulnerabilities such as:

- ✓ Fast urbanization and higher concentrations of people and property in cities in exposed coastal regions,
- ✓ Poor development planning, construction practices, etc.
- ✓ Complex inter-dependent supply chains and trade patterns,
- ✓ Cascading failure effects of critical infrastructure,
- ✓ Cascading impacts of natural and man-made catastrophes

\ Increasing incidence and severity of hazards

- ✓ Extreme weather-related events due to climate change.

\ **Direct impact**

- ✓ emergency relief and response expenditures,
- ✓ relocation of affected and/or at-risk citizens,
- ✓ reconstruction or improvements of non-insured or partially-insured public infrastructure and family dwellings,
- ✓ costs of social and economic programmes for rehabilitation and recovery,
- ✓ contingent liabilities for state-owned and other enterprises that are critical to economic recovery.

\ **Indirect impacts:**

- ✓ decreased tax revenues associated with business interruption and decline in GDP growth,
- ✓ opportunity cost of diverting funds from intended development plans to reconstruction and recovery programmes,
- ✓ additional expenditures related to effectiveness of social recovery programmes,
- ✓ increased borrowing costs and potential negative impacts on the sovereign credit rating; and,
- ✓ migration of population due to loss of livelihoods.

\ **Direct impact**

- ✓ cost of reconstruction of uninsured or partially-insured assets,
- ✓ cost of replacement or repairs of uninsured or partially-insured assets,
- ✓ health care,
- ✓ loss of sources of income,
- ✓ decline in property value due to destruction of surrounding infrastructure.

\ **Indirect impacts:**

- ✓ loss of income due to business interruption, unemployment, death or economic decline,
- ✓ increased borrowing costs;
- ✓ additional costs such as relocation and alternative housing and long-term disability.

\ **At a sectoral level, the economic consequences of some disaster risks could be felt:**

- ✓ Across an entire supply chain effecting economic

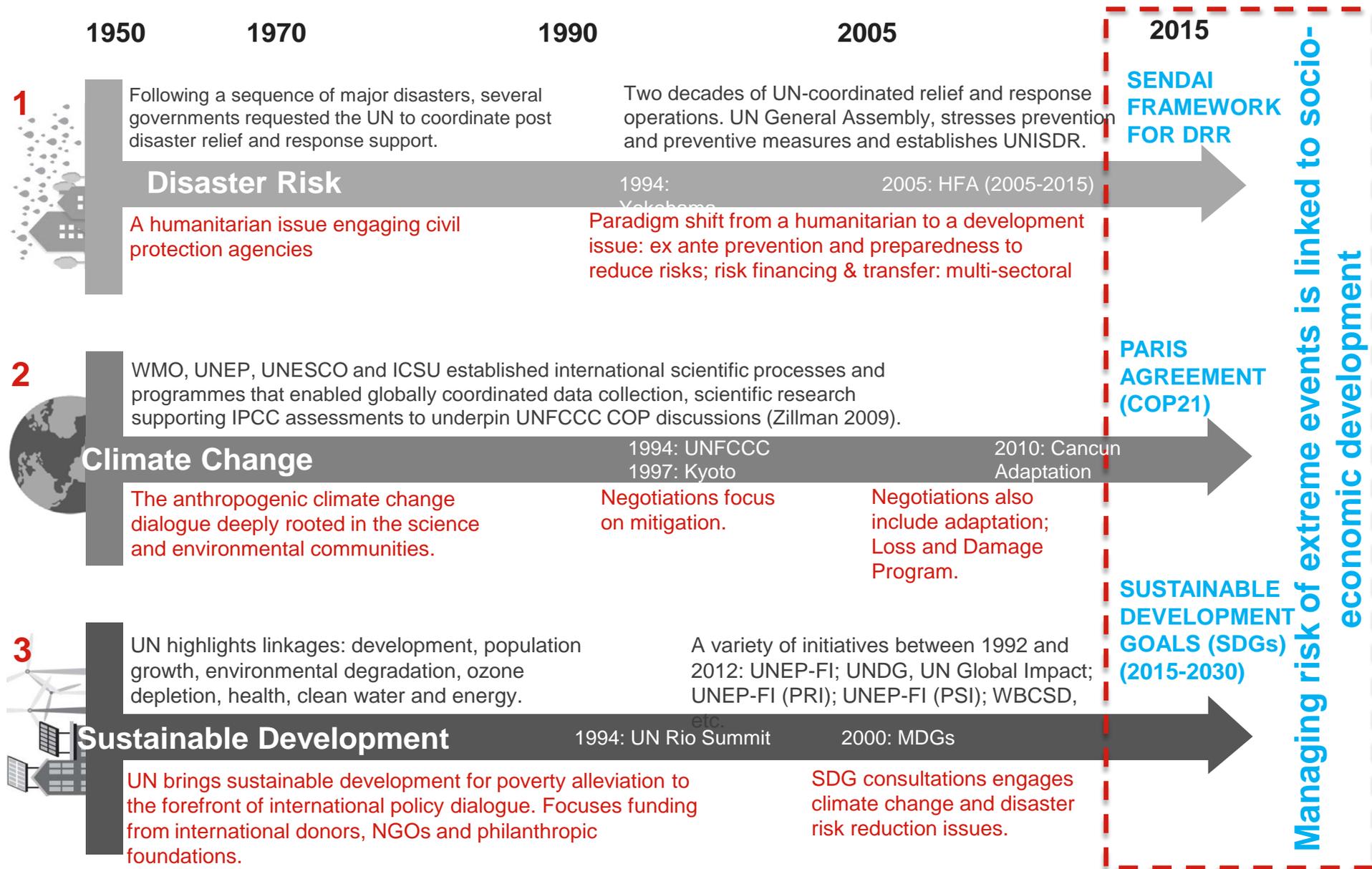
e.g., disrupt country's exports, market accessibility or have global impacts that result from supply chain disruptions

\ **In countries with limited economic diversity, a single catastrophe can lead to profound economic impacts.**

\ **For low-income nations, these types of economic shocks**

- ✓ Can deepen poverty levels
- ✓ Lead to complex emergencies, requiring significant humanitarian and relief interventions.

The global movement over the last decade and a half and the related public-private partnerships (PPPs) to reduce socio-economic risks of extreme events and climate change





Increasing evidence of a paradigm shift in governments' approaches, from “post-disaster response” towards a more proactive approach



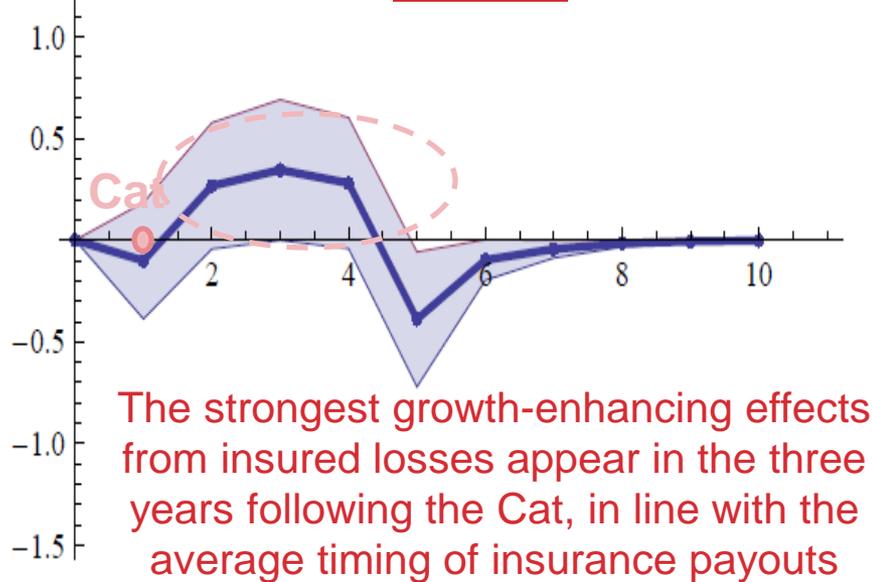
Some trends

- \ **Increasing risk awareness about the underpinning causes** of risk
- \ **Shift from fragmented silo line-ministry** towards a more integrated approach (within and across government layers)
- \ **Disaster risk management is being integrated in national development plans/budgets**
- \ **Involvement of ministers of finance** is “slowly” coming into focus.
- \ Traditional **post-disaster government hand-outs** proving **ineffective and insufficient**
- \ Role of **market-based insurance and ART** is being recognized by governments.
- \ **Interconnectivity and vulnerability of supply chains**

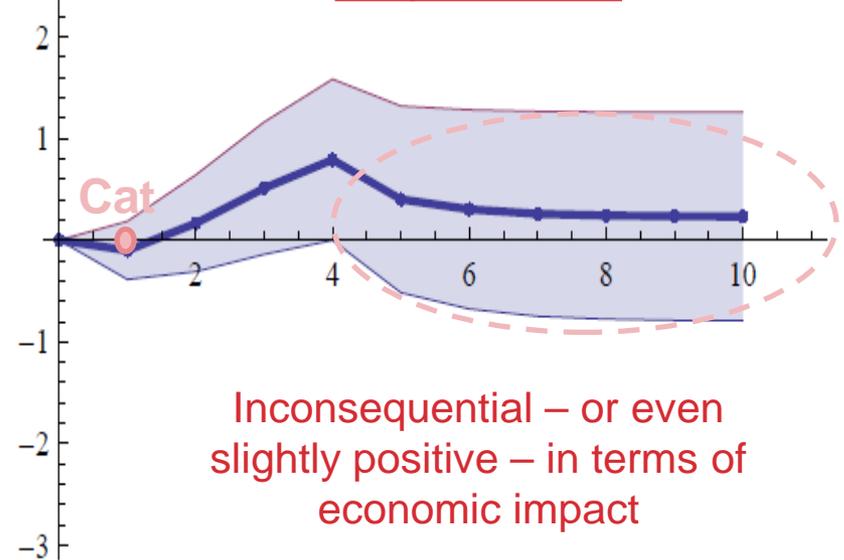
How can market-based insurance help with building economic resilience?

Insurance plays an important role in mitigating the macroeconomic costs arising from major Cats

Impact on GDP growth rate if fully insured

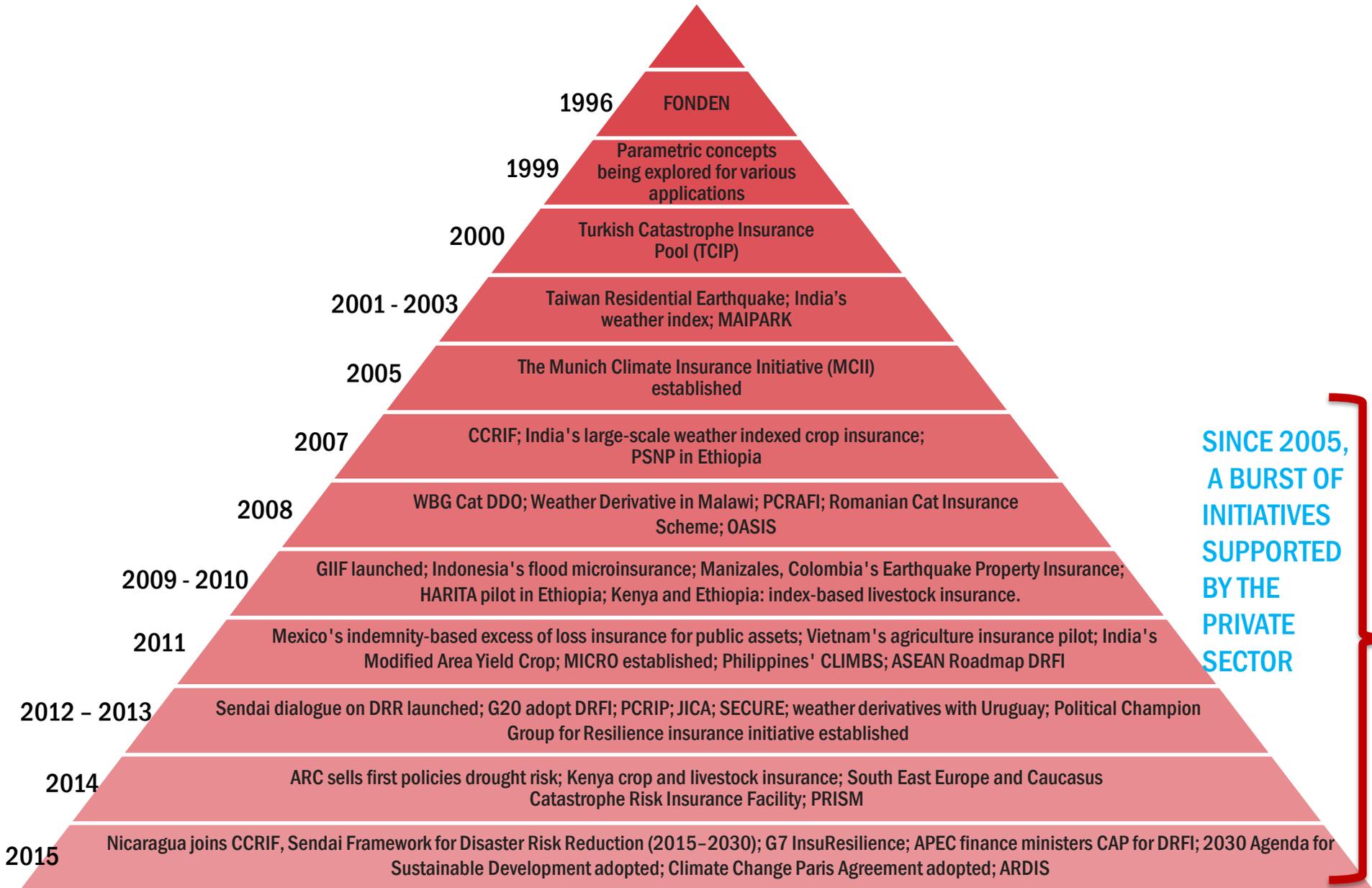


Cumulative effect on GDP level if fully insured



It is mostly the uninsured part of catastrophe-related losses that drives the subsequent macroeconomic costs

A wide range of risk transfer solutions have been developed to support middle- and low-income nations in transferring these risks



The insurance industry is already taking action through its underwriting and specialized services...

- \ **Offering risk transfer products** to:
 - Build financial resilience to Nat cat
 - Protection of government budgets, e.g., regional pools
 - Business interruption, contingent business interruption, supply chain failure
- \ **Insurers are underwriting and investing in critical infrastructure**
- \ **Setting up Innovation unites, incubators** for analytics and adaptation research
- \ **Offering customers** (and increasingly governments) with risk knowledge, preventive solutions with incentives
- \ **More efficient assessment and pay out** systems compared to post disaster aid

Eight primary factors hindering the expansion of market-based insurance...

1. Limited access to risk information and risk pricing difficulties
2. Public policy, legislative and regulatory issues related to, e.g.,:
 - Risk reduction and risk transfer;
 - Enabling the insurance industry to operate
3. General lack of awareness about economic benefits of insurance
4. Need for stakeholder-relevant products
5. Weakness of domestic insurance market in rural and low-income countries
6. Limited take-up linked to post disaster aid and complexity of products
7. **Regulatory barriers to access global reinsurance (in some countries)**
8. Scalability and sustainability

Need to address national regulatory barriers that are hindering access to the global insurance and reinsurance markets.

- \ The Geneva Association is working with the leading global insurance and reinsurance companies and governments to pave the way to open up access to the global insurance and reinsurance markets
- \ Through the Global Reinsurance Forum of the Geneva Association, regulatory impediments to accessing the global insurance and reinsurance markets have been identified
- \ For details please see the Global Reinsurance Forum's documents at. www.GRF.org
- \ We look forward to working together to help all nations with their efforts to build financial and economic resilience to disasters.

Thank you

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For more information about The Geneva Association: www.genevaassociation.org

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- 3) Geneva Association (2017): The “Global” Stakeholder Landscape in Extreme Events and Climate Risk Management**
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Managing extreme event risks requires clear risk governance and leveraging partnerships with the private sector



Role of government

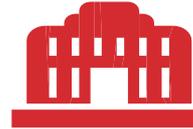
Provide enabling environments
sound policies and regulations

Layout institutional foundations, policies, regulatory frameworks and institutional mechanisms for coordinated planning and budgeting

Understand the underpinning causes of risk and facilitate systemic collection of reliable hazard and socio-economic data
e.g., critical infrastructure

Realize opportunities and enforce risk reduction (preventative and preparedness measures), risk transfer programs (PPPs)

Invest in educating and raising awareness and incentivize risk ownership



Role of insurance industry

Share risk knowledge, modeling expertise and risk and pricing expertise

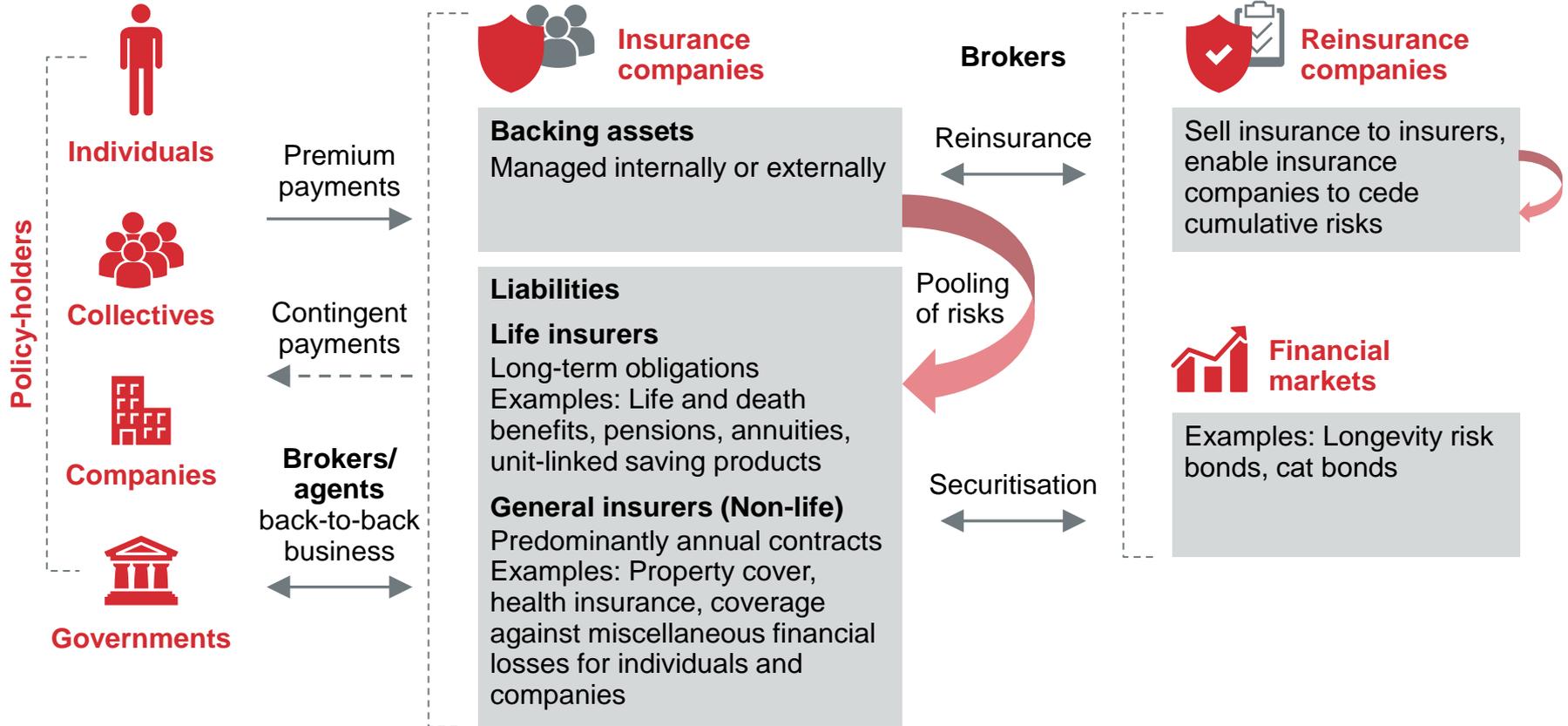
Share research and knowledge in preventative measures

Innovate and avail risk transfer products (insurance and ART)

For governments, businesses, communities, individuals
(incentives to change behaviour)

Faster and more efficient claims settlements
Management and payouts

Support development of sound risk transfer programmes with the governments



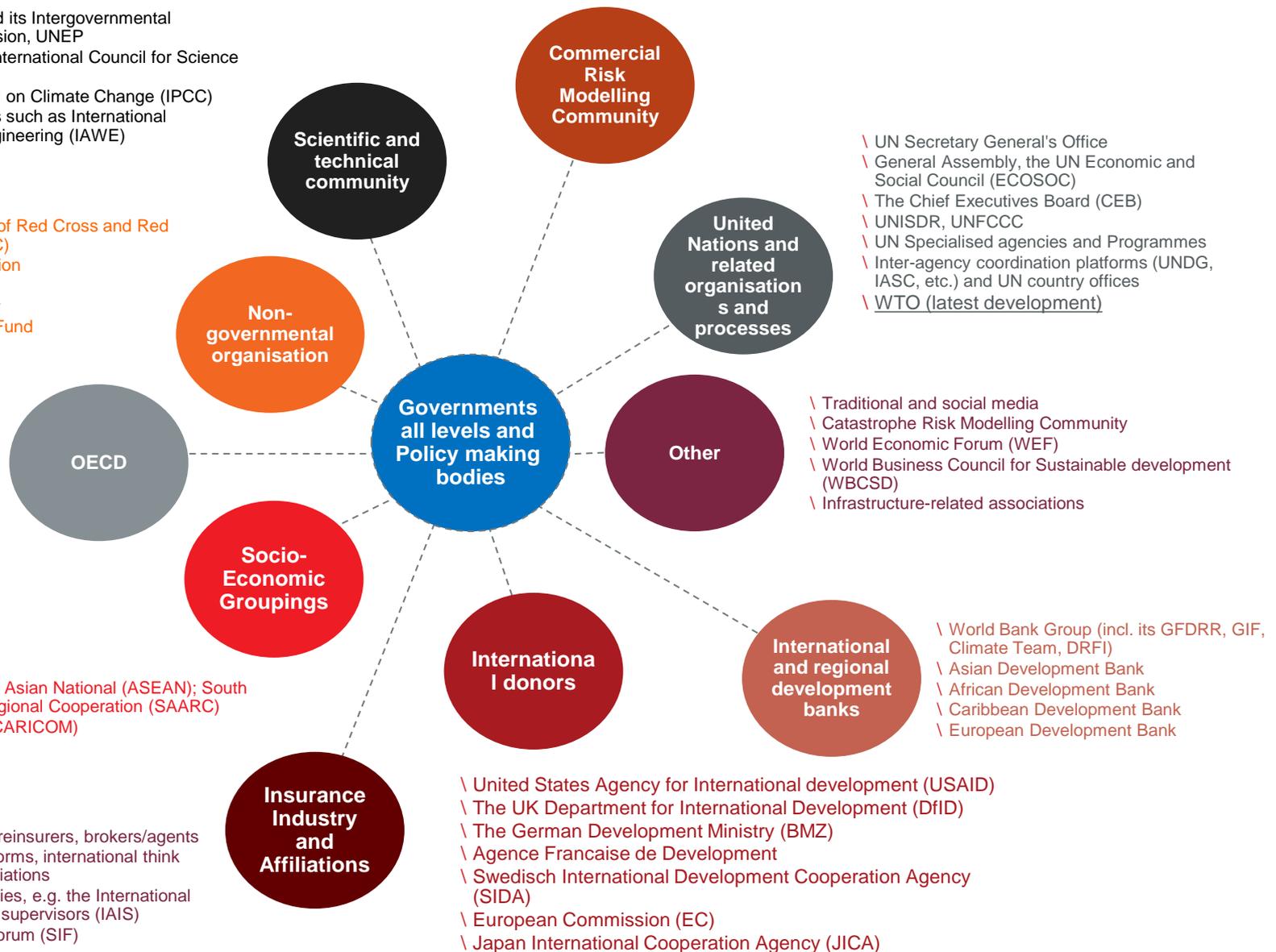
- Insurers as risk managers: Insurers assess, price, assume and transfer risk on behalf of their policy-holders, through three methods: pooling of risks, retrocession and securitisation
- Insurers as investors, the strategy is liability-driven, constrained by regulations and driven by a number of internal and external factors (Asset-Liability Management, ALM)

- \ UN: WMO, UNESCO and its Intergovernmental Oceanographic Commission, UNEP
- \ The non-governmental International Council for Science (ICSU)
- \ Inter-governmental panel on Climate Change (IPCC)
- \ Engineering associations such as International Association for Wind Engineering (IAWE)

- \ International Federation of Red Cross and Red Crescent Societies (IFRC)
- \ The Rockefeller Foundation
- \ Oxfam
- \ The Nature Conservancy
- \ Environmental Defence Fund
- \ World Wildlife Fund

- \ G7
- \ G20
- \ EU
- \ Asia-Pacific Economic Cooperation (APEC)
- \ Association of Southeast Asian National (ASEAN); South Asian Association for Regional Cooperation (SAARC)
- \ Caribbean Community (CARICOM)

- \ Primary (direct)insurers, reinsurers, brokers/agents
- \ Multilateral industry platforms, international think tanks and industry associations
- \ Insurance regulatory bodies, e.g. the International Association of insurance supervisors (IAIS)
- \ Sustainable Insurance Forum (SIF)



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