

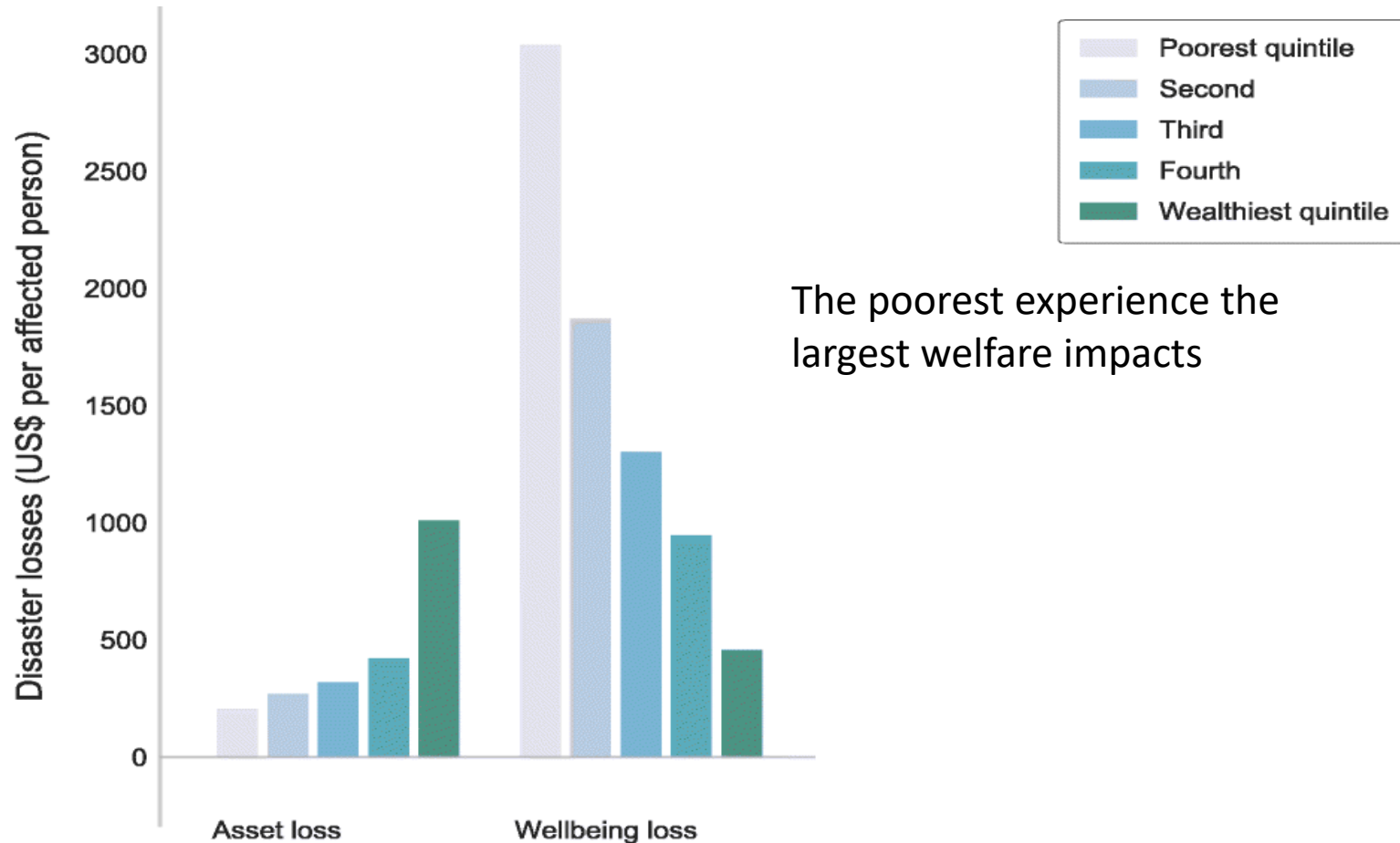
What do we need to be prepared?

Stephane Hallegatte

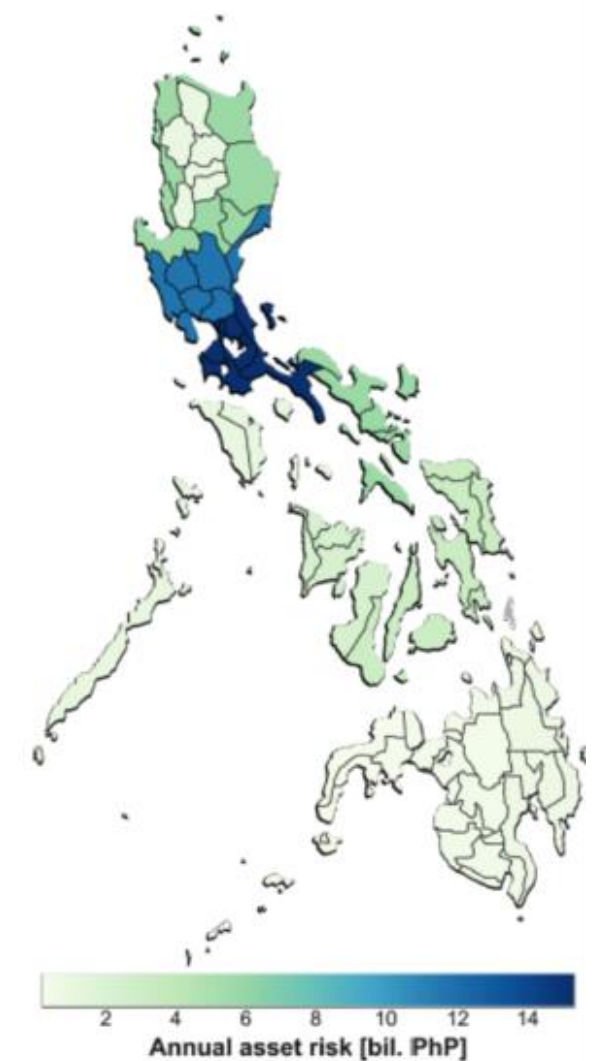
The World Bank

COVID-19 and other disasters: similarities and differences

A similarity: Poor people lose little in absolute value, but their wellbeing is the most affected

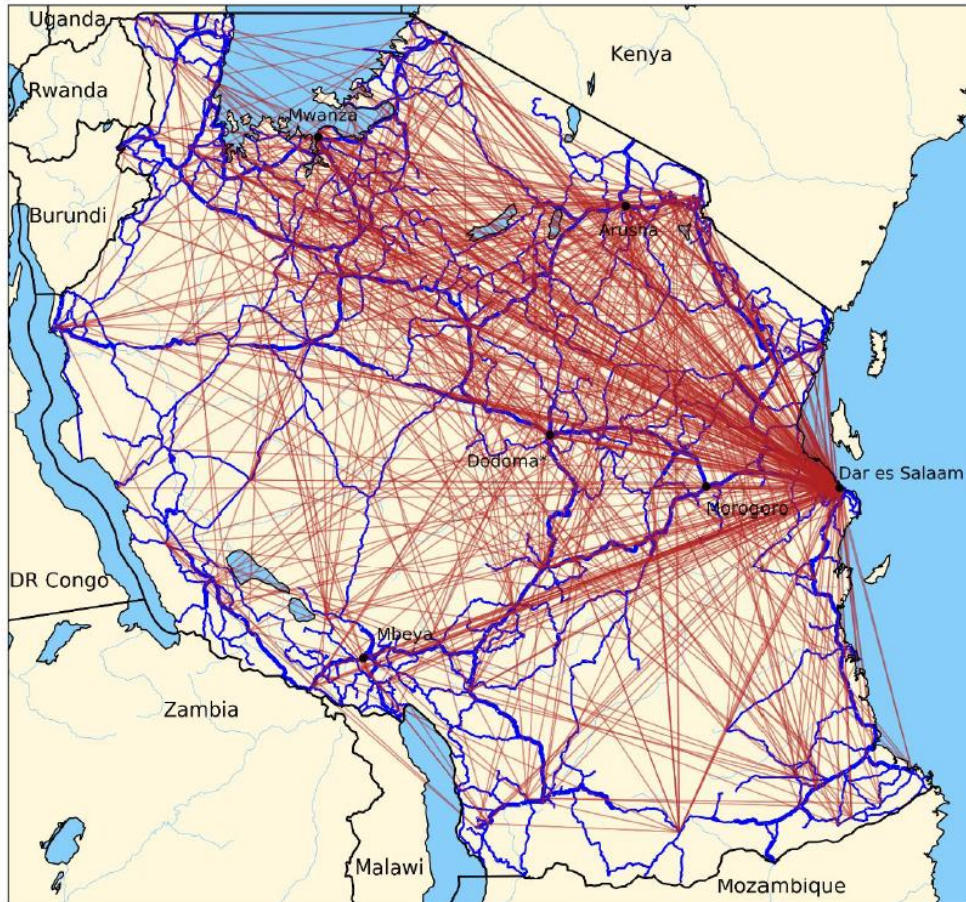


The poorest experience the largest welfare impacts



Impacts are highly heterogenous, something many of our tools fail to capture

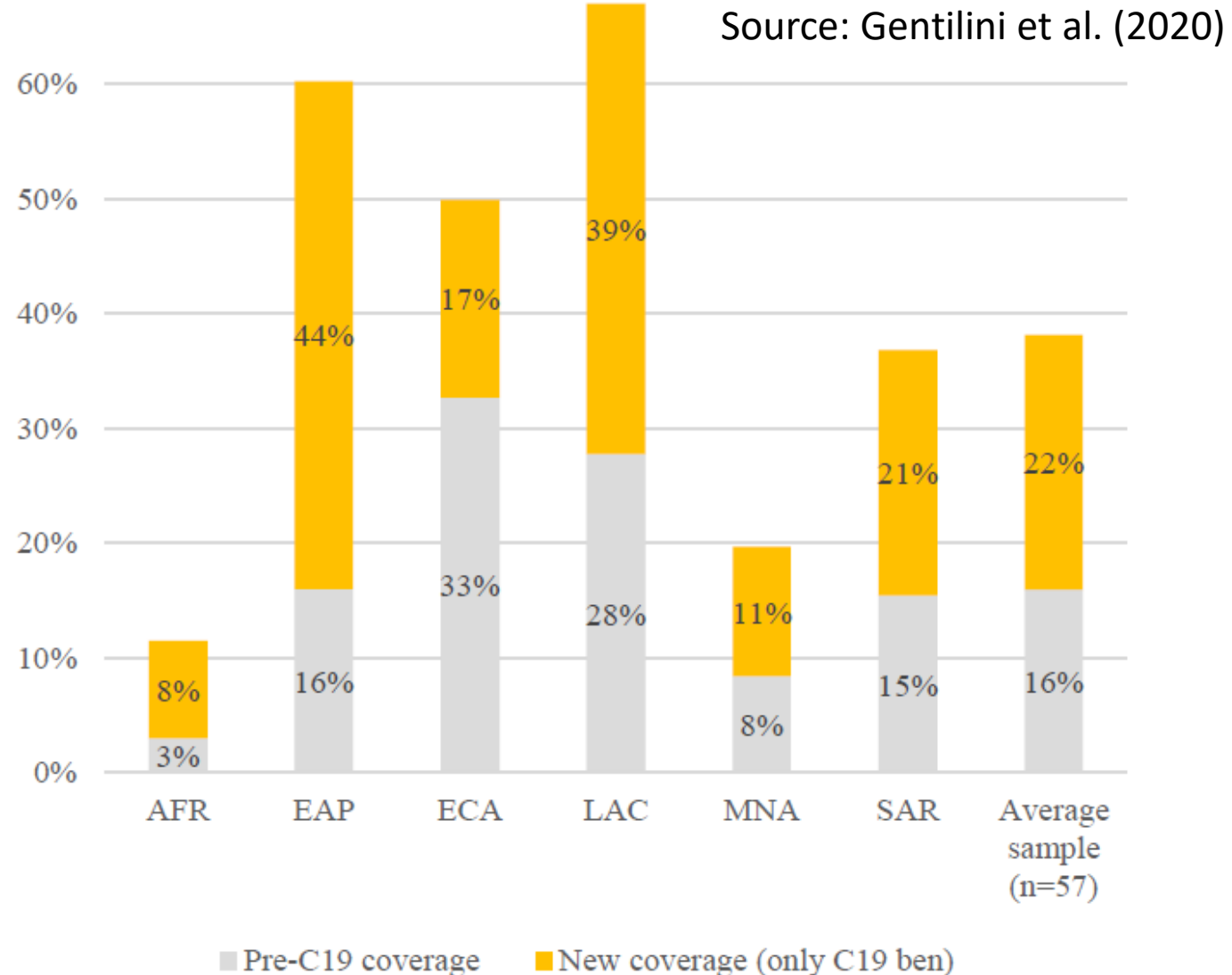
Another similarity: Beyond the direct effect, propagation through supply chains plays a key role



A last similarity: social protection systems are key to protect populations against shocks

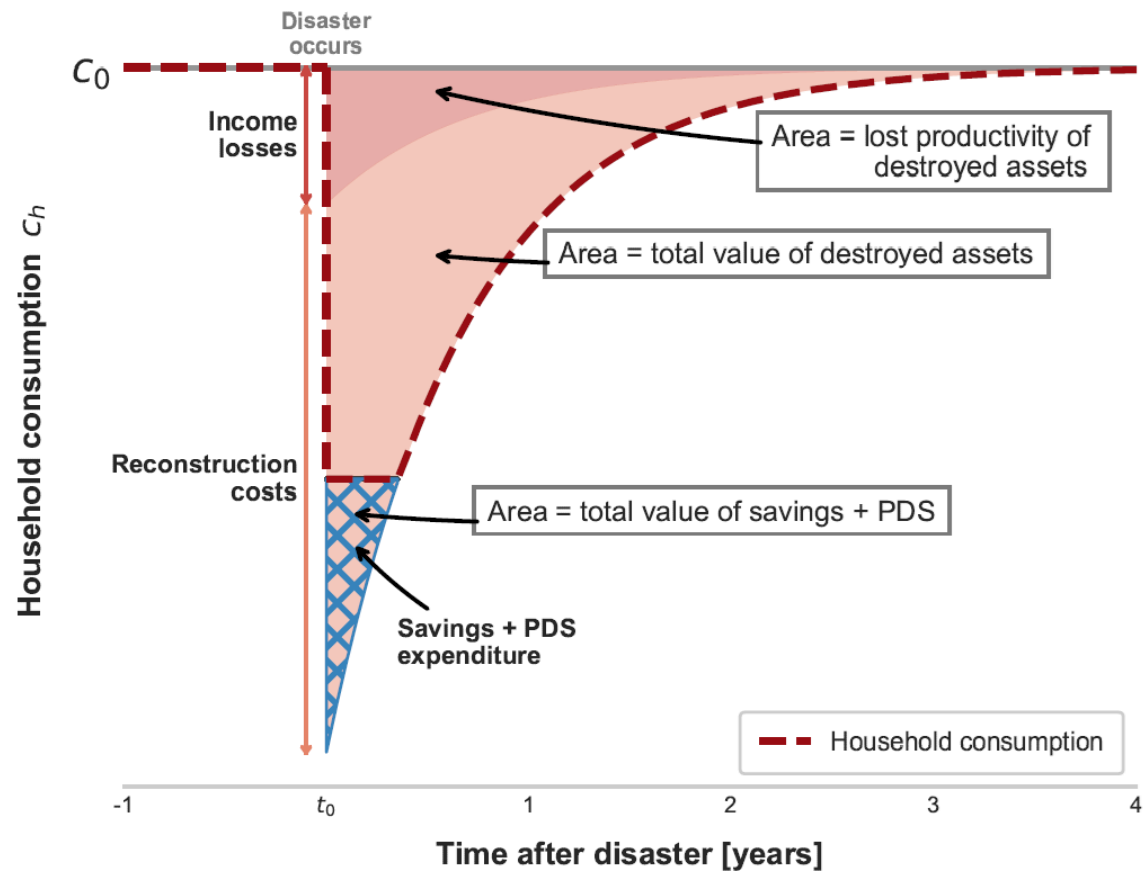
Short-term response to COVID-19 economic impacts have led to a **massive increase in the coverage of social protection** across the world.

The strengthening of social protection scalability, if maintained over time, can help make countries **more resilient to future impacts of climate change**.

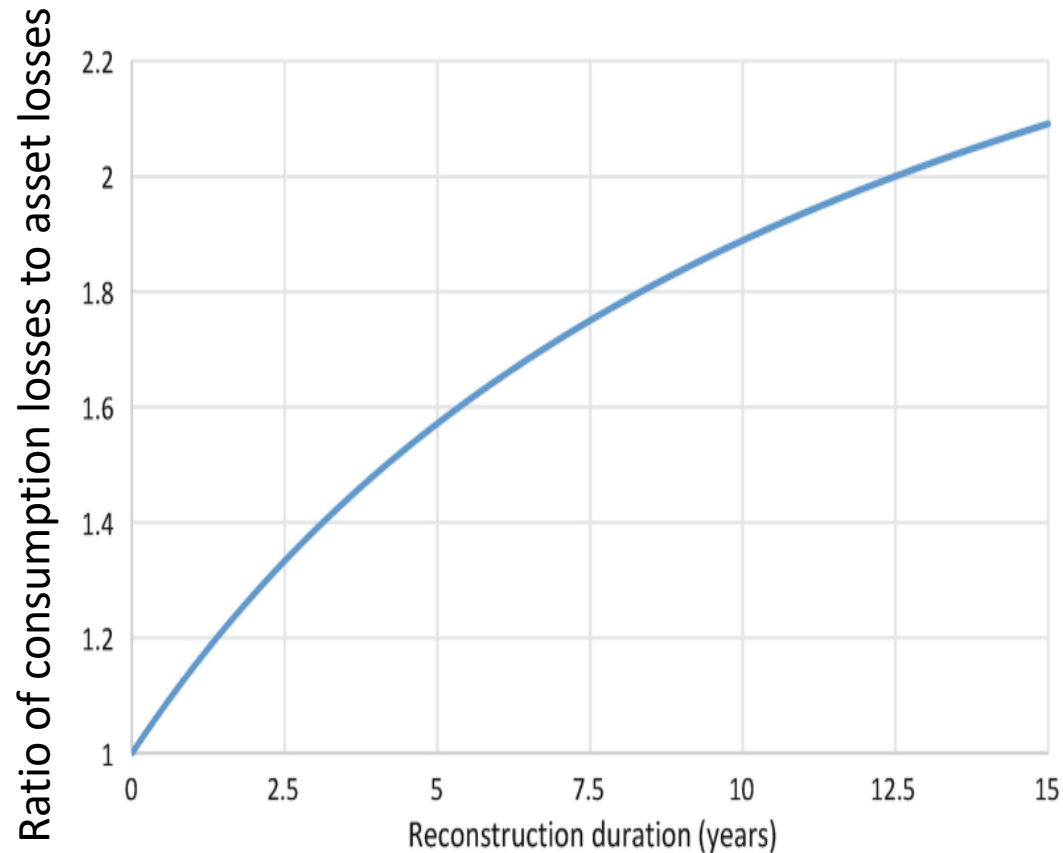


A difference: for many “traditional” disasters, consumption impacts are more than GDP impacts

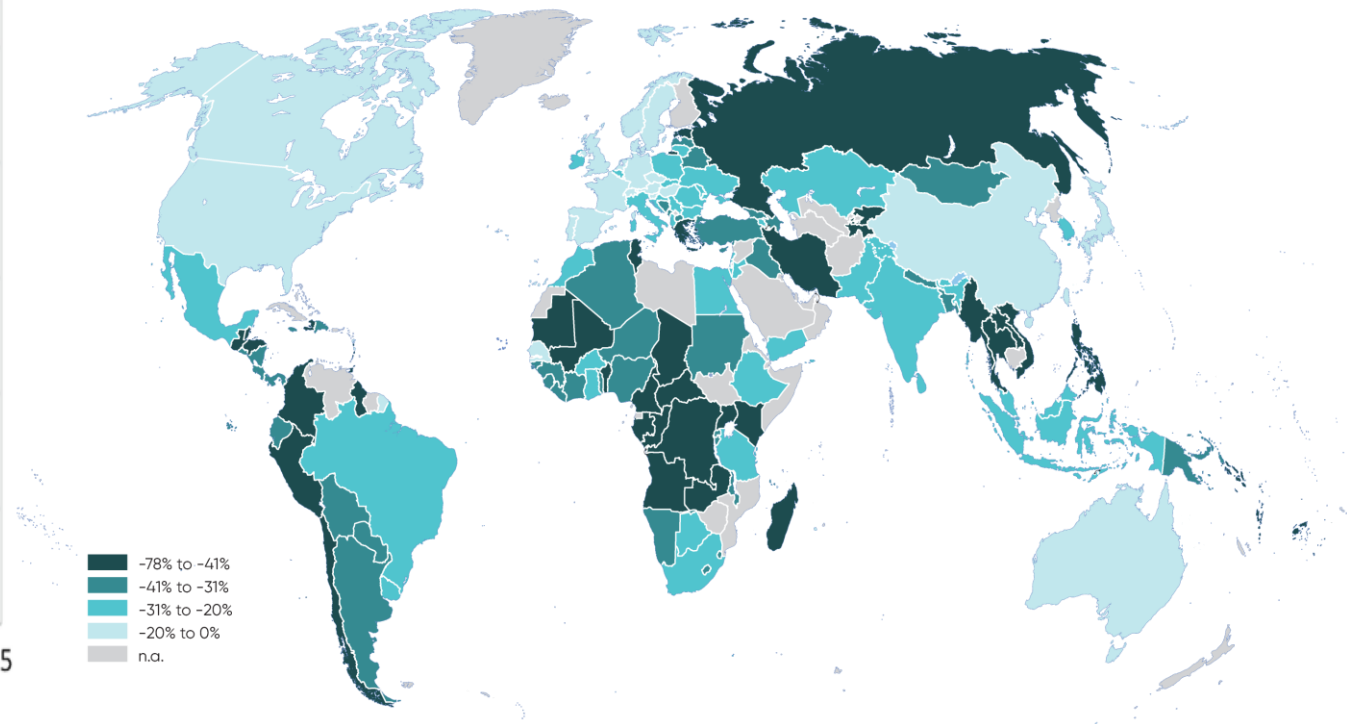
After most disasters, most of the drop in consumption comes from the need to pay for repair and replacement of lost assets



Accelerating (and improving) the reconstruction process can reduce wellbeing losses



Source: Hallegatte and Vogt-Schilb, 2019, [Advances in Spatial and Economic Modeling of Disaster Impacts](#)



A stronger, quicker, and more inclusive reconstruction everywhere would reduce global well-being losses due to disasters by **31%**.

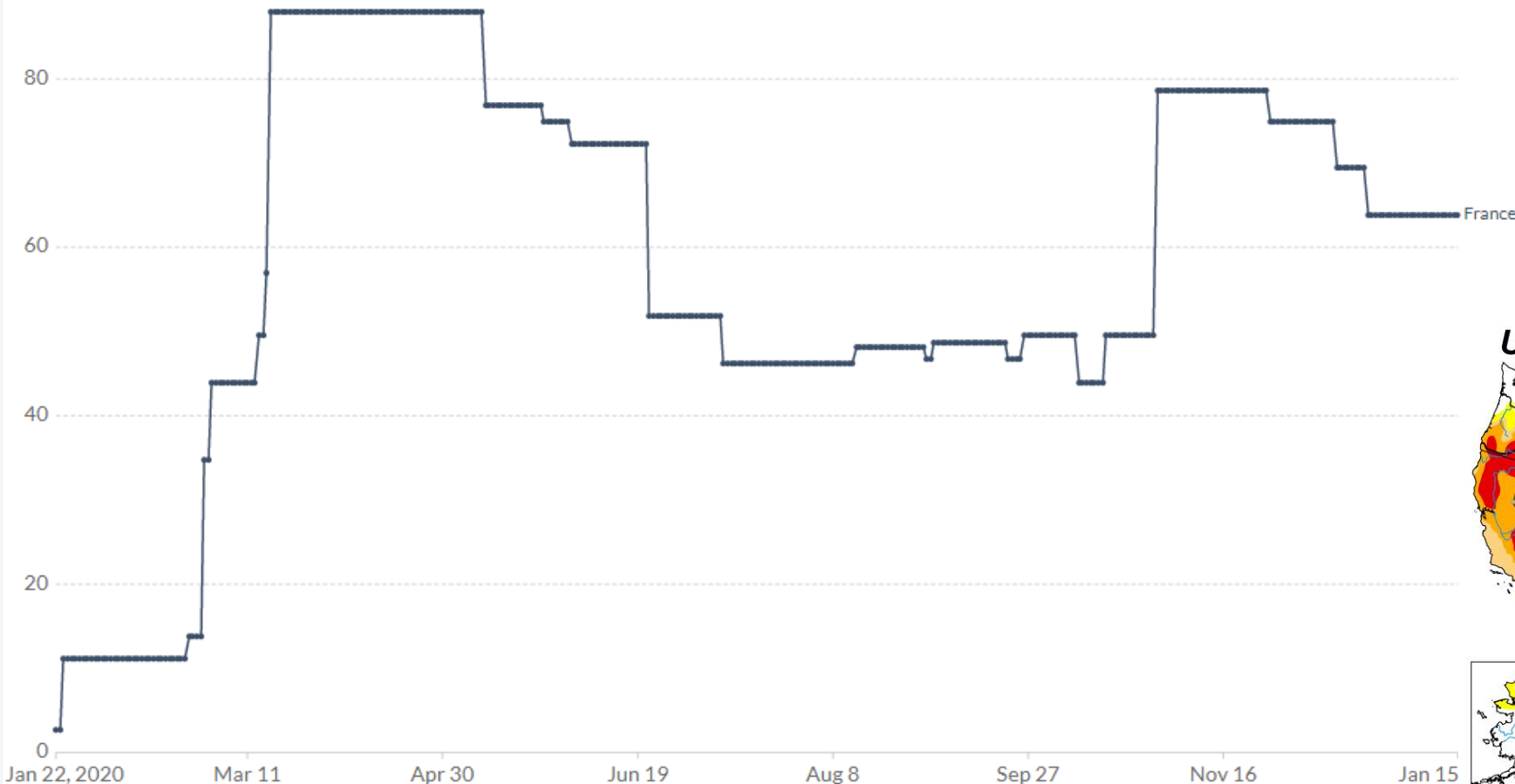
COVID-19 is more similar to a drought, where both water-use restriction and water scarcity affect people

COVID-19: Government Stringency Index

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.

Our World in Data

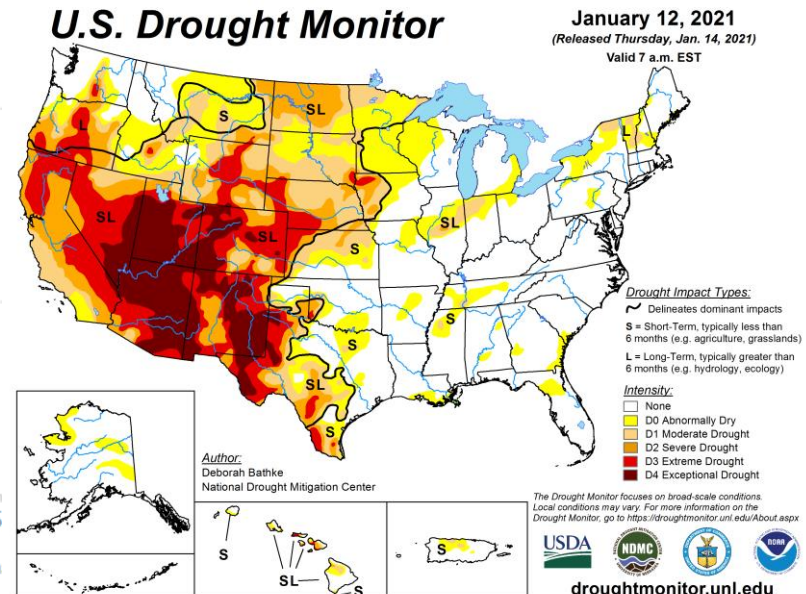
+ Add country



Source: Hale, Webster, Petherick, Phillips, and Kira (2020). Oxford COVID-19 Government Response Tracker - Last updated 18 January, 16:01 (London time)

Note: This index simply records the number and strictness of government policies, and should not be interpreted as 'scoring' the appropriateness or effectiveness of a country's response.

OurWorldInData.org/coron



How do we prepare for future shocks?

Traditional risk assessment combines hazard, exposure and vulnerability of assets ...

ASSET LOSSES

1. Hazard

2. Exposure

3. Vulnerability



LATINO

Puerto Rico lost \$43 billion after Hurricane Maria, according to govt. report

“Given the magnitude of the natural disaster, the economic sectors will keep feeling the impact for an undetermined amount of time,” the report says.





WORLD • HURRICANE IRMA

Hurricane Irma's Damage Could Cost Us \$300 Million, Antigua and Barbuda PM Says



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We also account for who is affected, and their **resilience**—that is, the capacity of affected people to cope with and recover from the shock

ASSET LOSSES

1. Hazard

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WELL-BEING LOSSES

1. Hazard

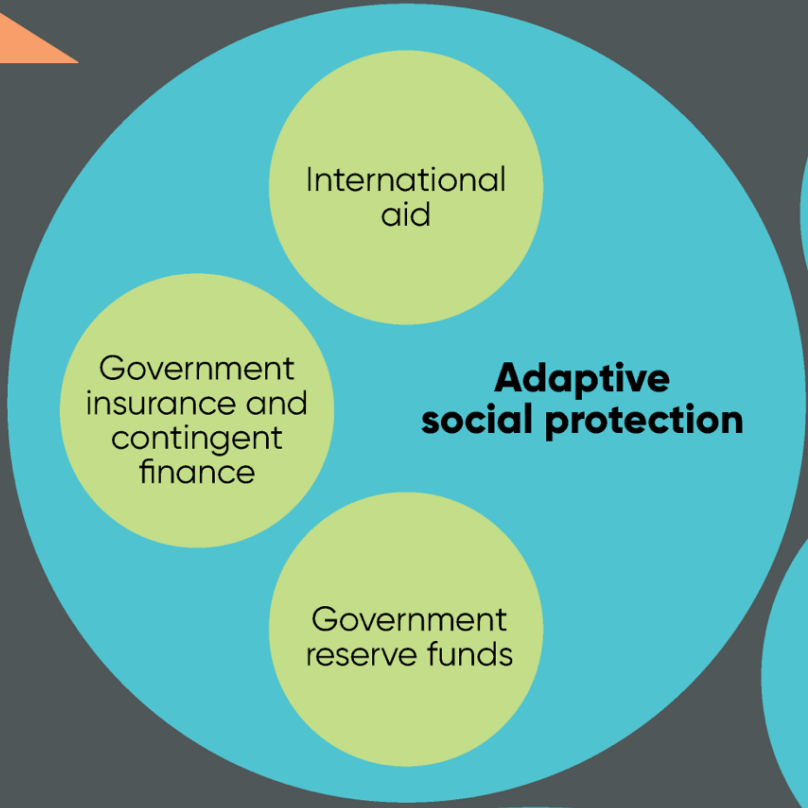
2. Exposure

3. Vulnerability

4. **Socioeconomic resilience**

$$\text{socioeconomic resilience} = \frac{\text{asset losses}}{\text{well-being losses}}$$

MORE IN-TENSE EVENTS



SMALLER EVENTS



POORER HOUSEHOLDS



RICHER HOUSEHOLDS

World Bank Group Announces Comprehensive Toolkit to Support Countries After Natural Disasters

June 22, 2023—The World Bank Group today announced a suite of new and expanded actions to help countries respond quickly and effectively to an ever-growing onslaught of crises.

At the Summit for a New Global Financial Pact, Ajay Banga announced an expanded toolkit for crisis preparedness, response, and recovery that includes: (1) pausing debt repayments; (2) redirecting financing; (3) linking crisis preparedness and financing; (4); backstopping development projects with private sector support, and (5) building enhanced catastrophe insurance without debt.

The World Bank Group aims to create a world free of poverty on a livable planet. We work to make people better prepared for threats of any kind by sharing our expertise, building resilience, and insuring against risks.



Country-level risk management strategies

PHILIPPINES

Risk to assets: \$28,000 million (4.5% of GDP)

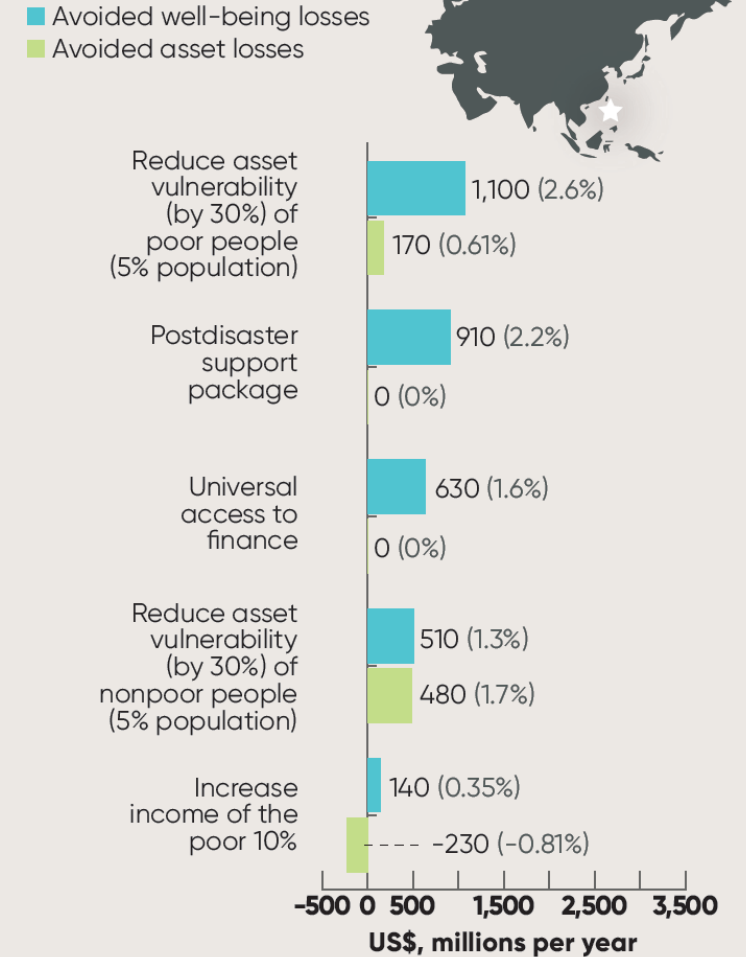
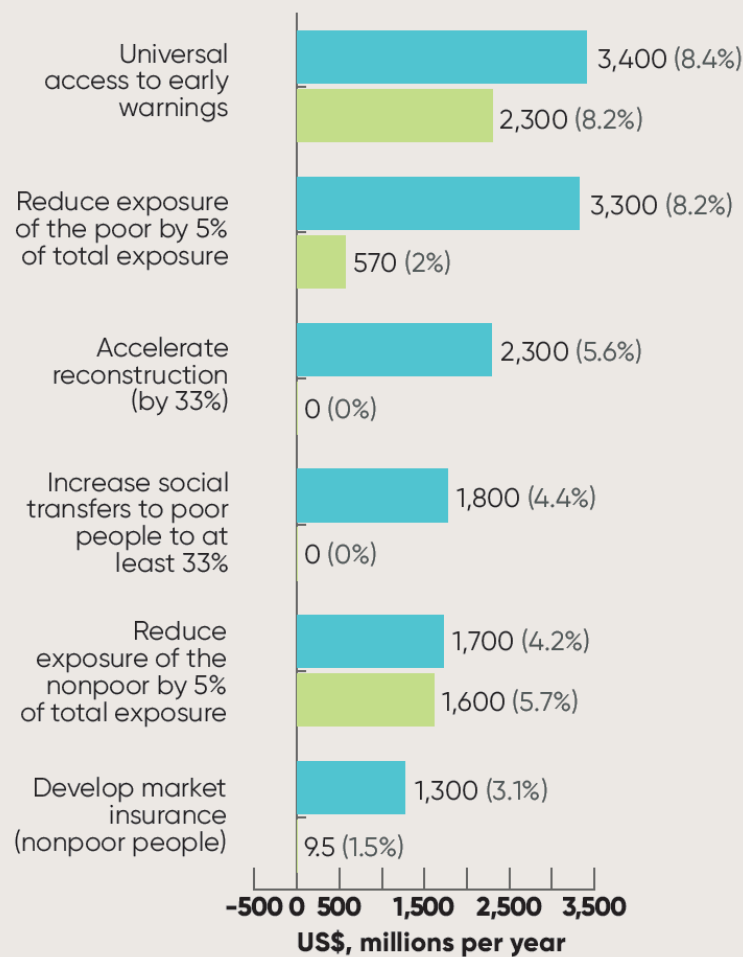
Socioeconomic resilience: 69%

Risk to well-being: \$41,000 million (6.5% of GDP)

EFFECTS OF POLICY OPTIONS—US\$ MILLION PER YEAR (% of current losses)



Strategies need to be designed at the country level.



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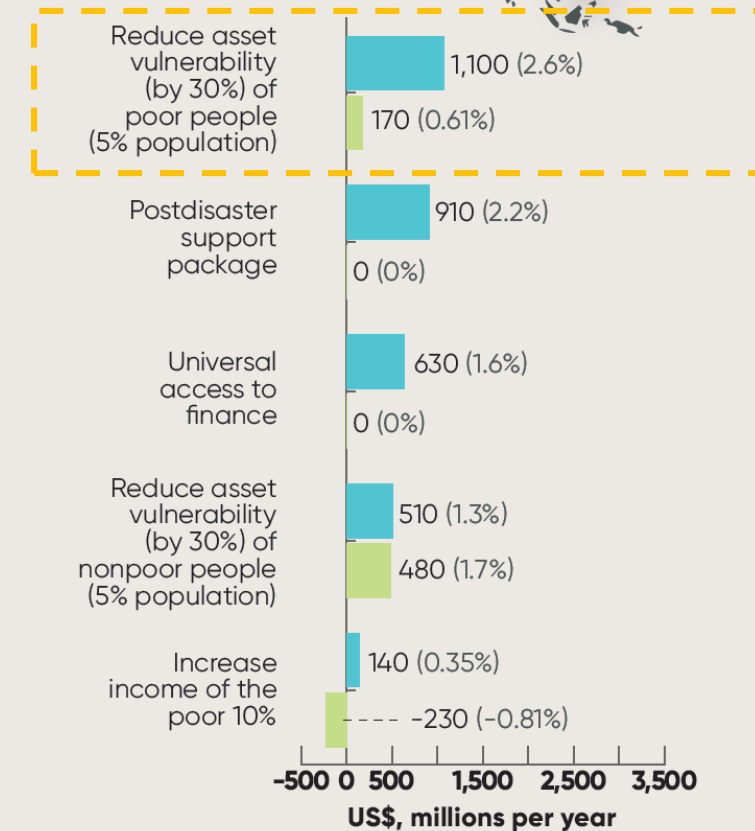
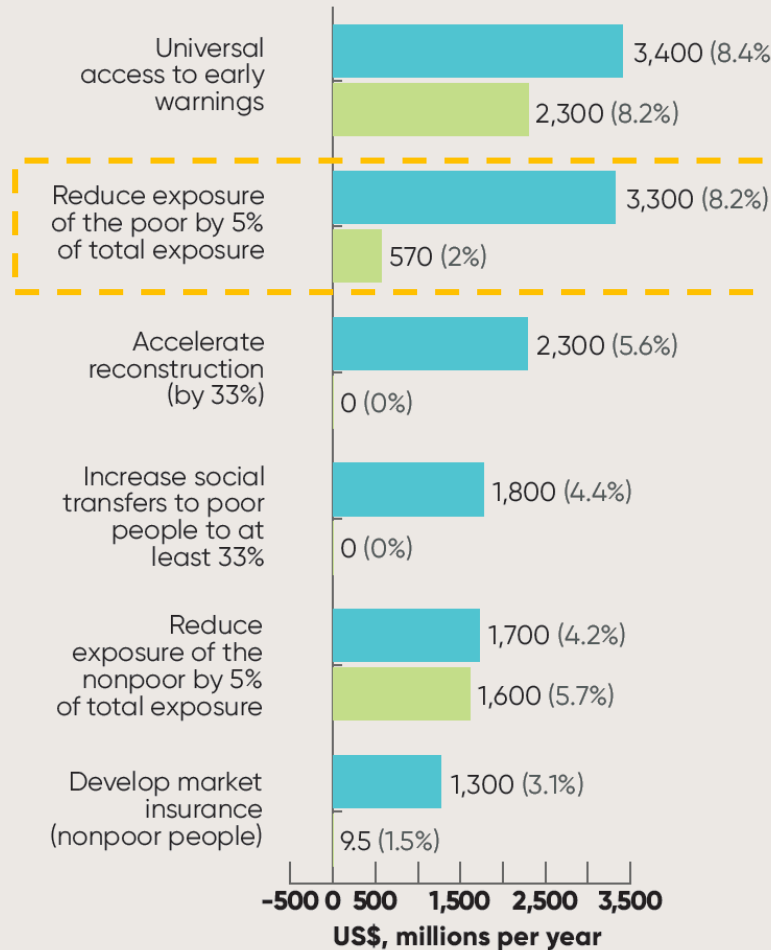
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■ Avoided asset losses



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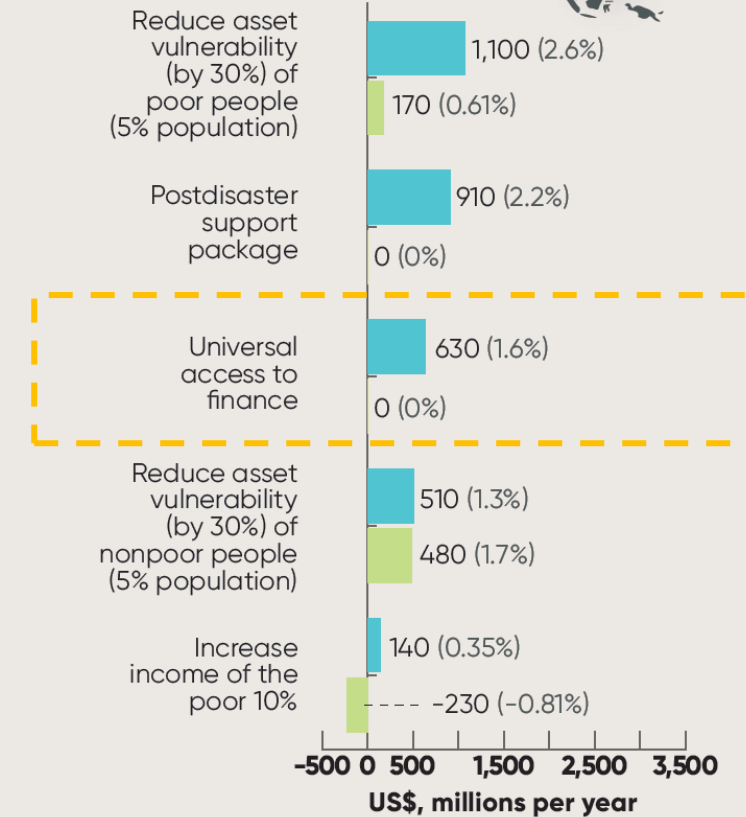
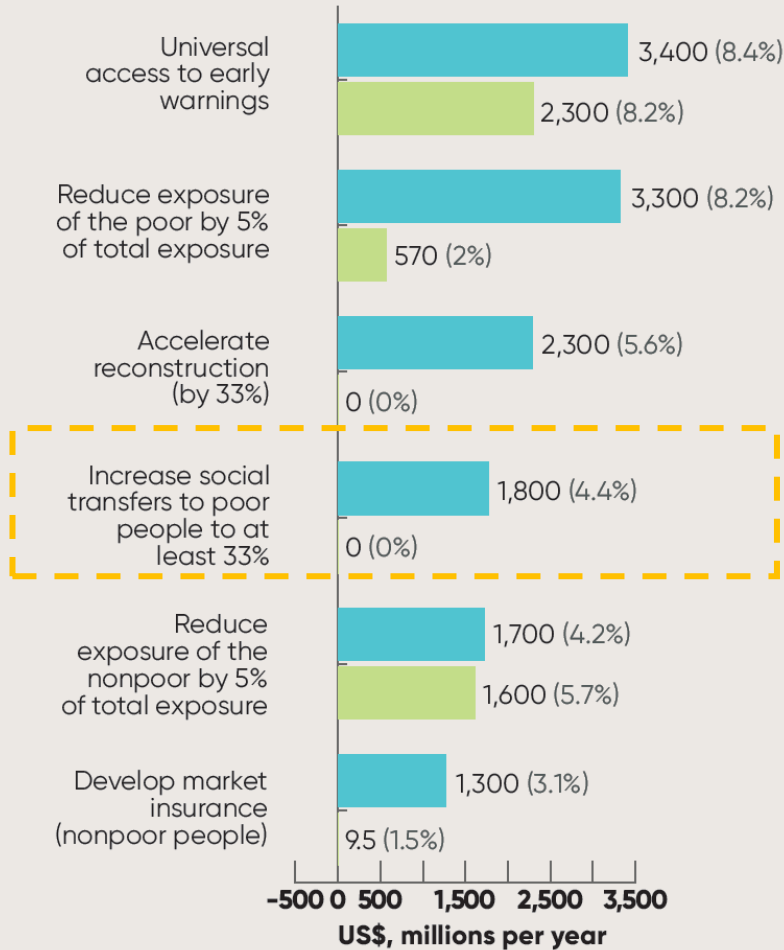
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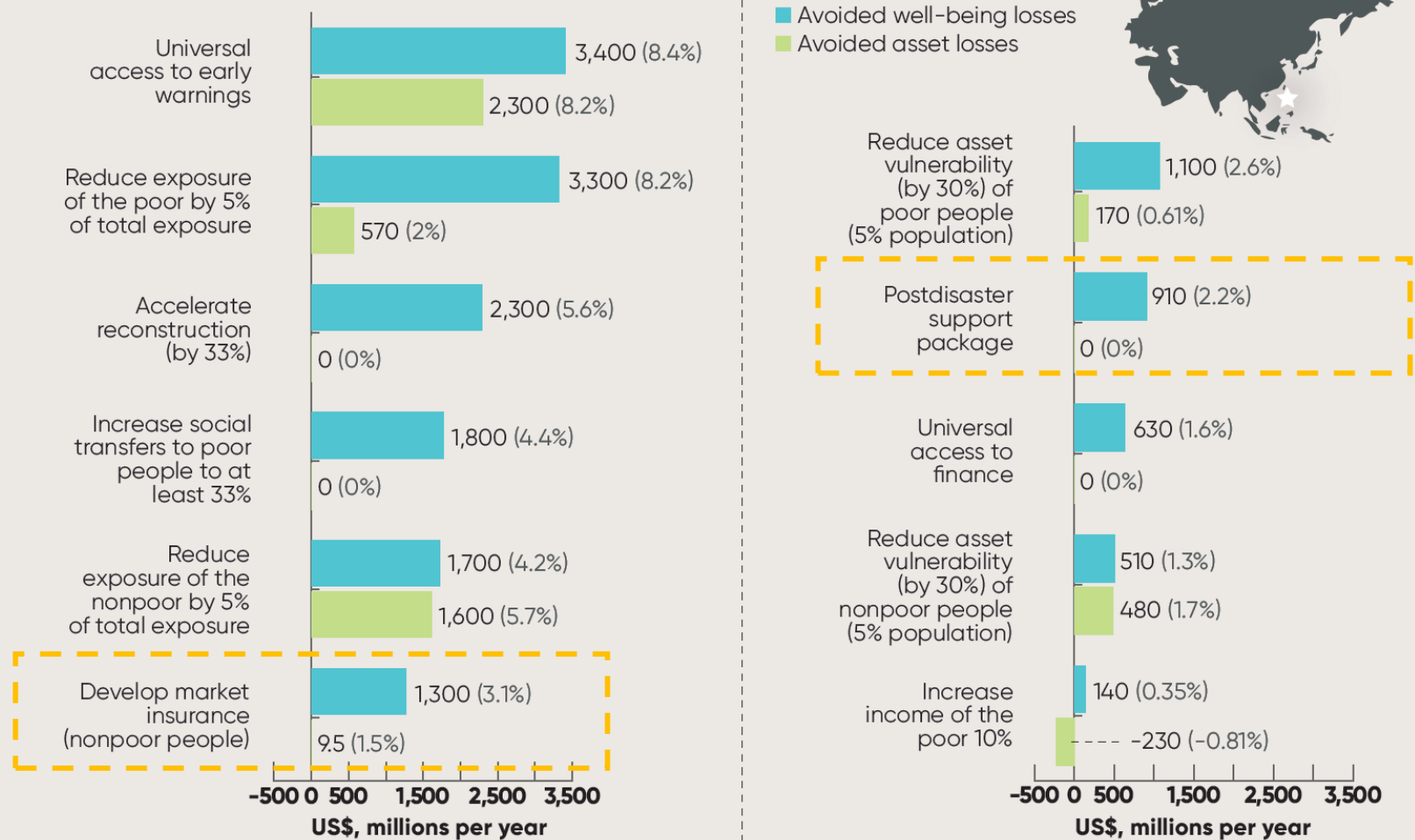
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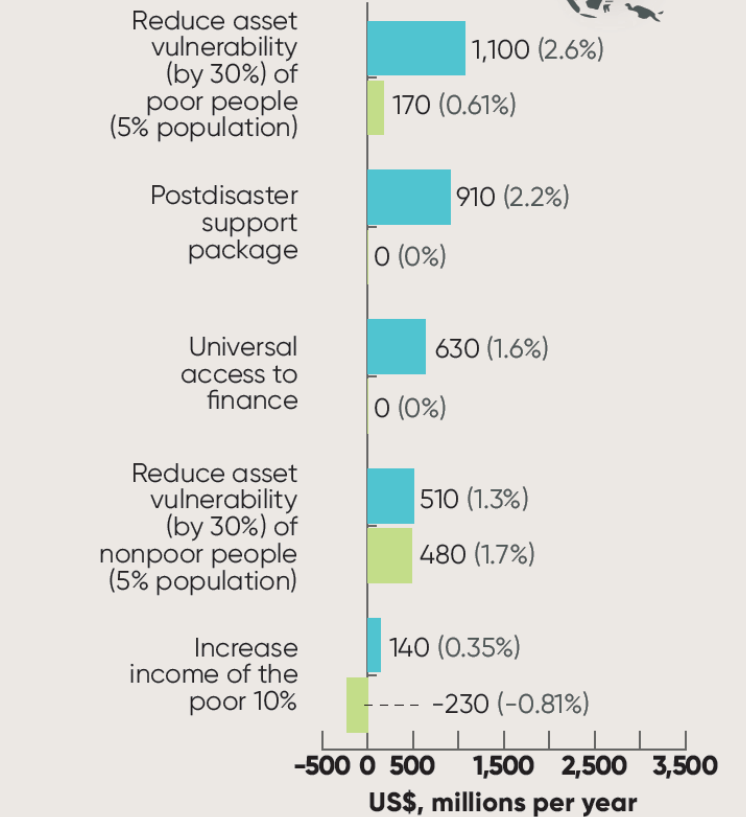
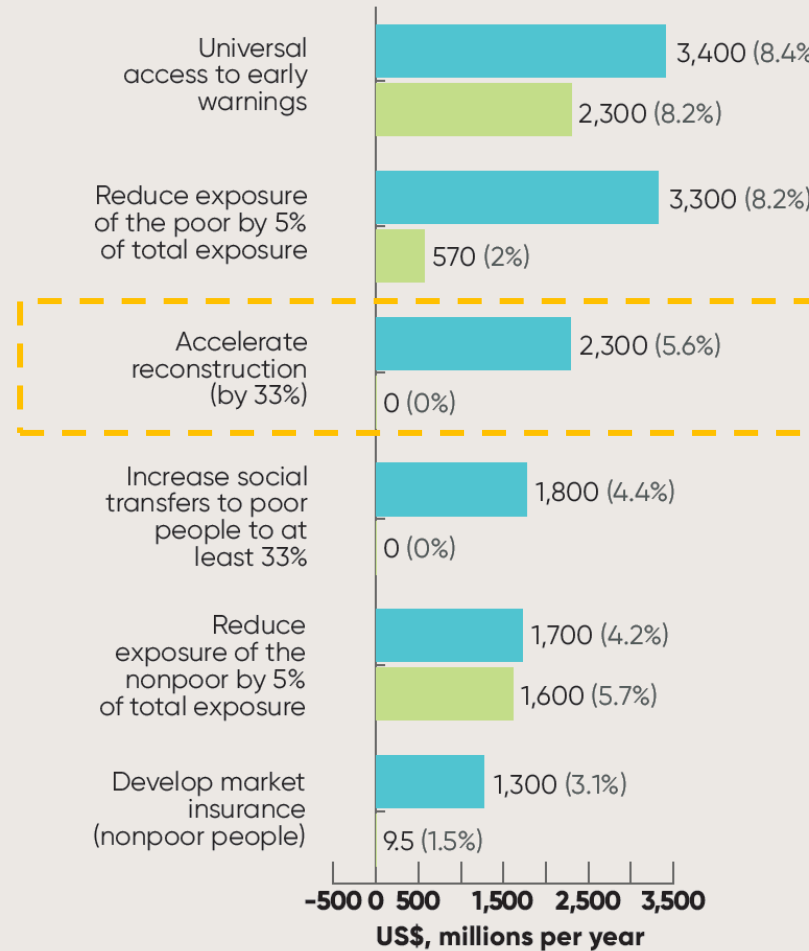
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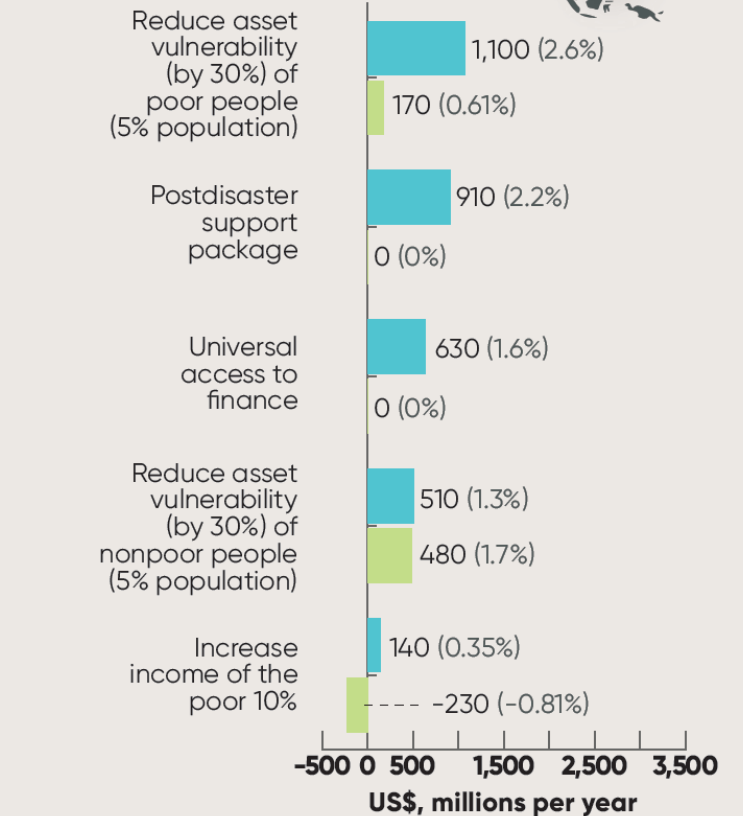
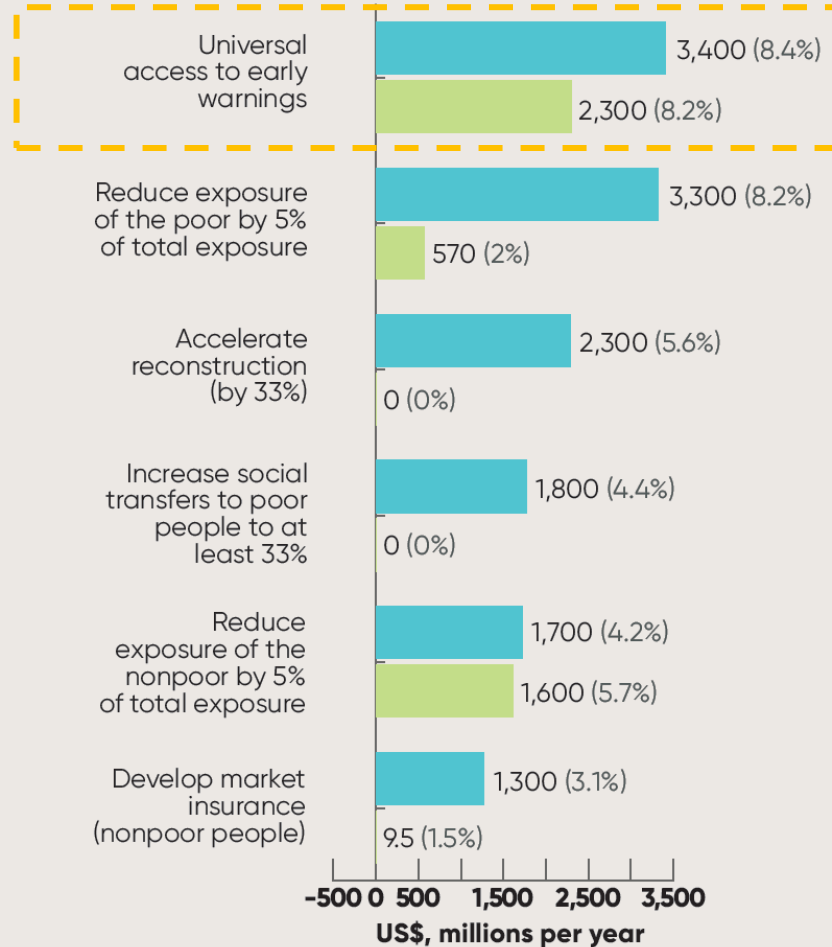
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More information?

shallegatte@worldbank.org