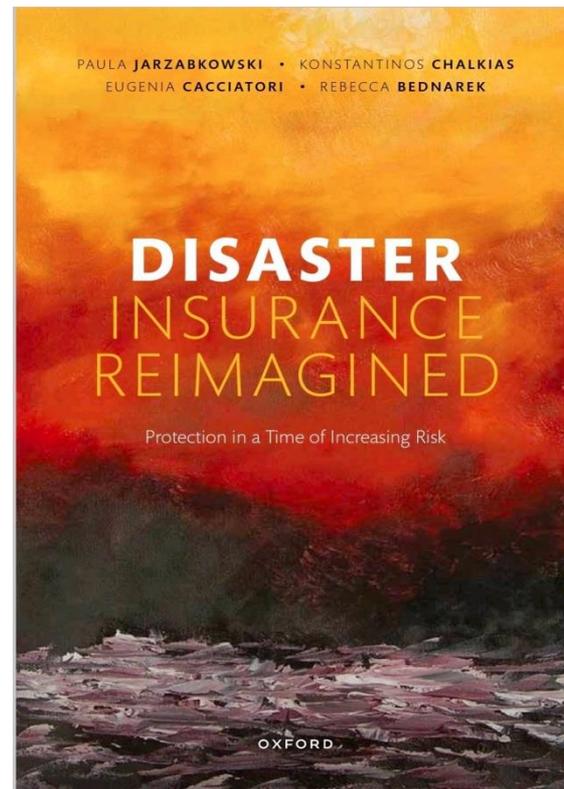


Disaster insurance. Maladaptation or Resilience?

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Protection Gap Entities (PGEs)

- Insurance brings global capital for reconstruction after disaster. Without it the burden falls on the state and the individual, causing great hardship
- In advanced economies, disaster insurance is in retreat: Unaffordable and unavailable (10% of Australian households)
- In response, governments can form a PGE: a government-legislated not-for-profit scheme to provide insurance
- The role of PGEs is growing, globally



What PGEs do

- Redistribute risk to create solidarity
- Remove risk onto a government balance sheet

Integrating Physical and Financial Resilience

back to normal

PGE EFFECTS ARE NOT A BENIGN

Maybe insurance coverage wouldn't put you back in some insurance is there to put you back in the place where you were before. You had the home, it got damaged, you've put it back to what it was like before. But we're not improving your home. You're not profiting out of your insurance claim, even if that might make you more resilient to flooding and make you a better risk in the future (Interview – Insurance Industry).

Three Dimensions of Integration

1. Short term rebuild – immediate integration of financial & physical resilience
BUT
 - a) Rebuilding what was there puts a maladaptation into the system
2. Putting in a transitional mechanism
 - a) BUT ... Still an individual approach to responsibility
3. Build resilient system

“The whole idea is to set this [PGE] up to give a window of opportunity to change things and reduce people’s risk” (Interview, Insurance Industry – Flood Re)

“We're doing thousands of retrofits now” (Interview – PGE - CEA).

Main features of the Swiss PGE System

- 19 cantonal, public-sector, not-for profit PGEs
- Compulsory multi-peril disaster insurance at **full reconstruction value with no limits**
- Double solidarity
 - Between insureds – same price within a canton, independently of risk
 - Between PGEs – inter-cantonal mechanism for support if some exceed their limits
- Self-regulating
- Interconnected

A self-regulating PGE system

- **Competition:** [The PGEs], they're competitors, so they always watch what is the other one doing. And that keeps the price low because if I [as a citizen] would learn that in Zurich I pay far more than in Basel then I would go to the head of the Zurich scheme and say hey, wait a second, why are we paying more? And he [the head of the Zurich PGE] will quickly be in deep trouble. (Interview – stakeholder)
- **Innovation:** In Switzerland ...we [PGEs] have to be very aware of the fact that if we don't have cheaper prices than the private industry, we have lost. And so, we have to be efficient, we have to promote innovations. (Interview - PGE)

An Interconnected PGE system

A deeply interconnected system, with the heads of cantonal PGEs sitting on the boards of the collective bodies

PGE's collective	
The Association of Cantonal PGEs (Vereinigter PGE-Kantonverband)	
The Four Cantons (Präventivversicherungsanstalt der Kantone Aargau, Appenzel A. u. S., Glarus und Schwyz)	
The Inter-cantonal PGEs (Interkantonaler Rückversicherungsverband)	
The Earthquake Insurance Fund (Erdbebenrückversicherungsfonds)	

We have fully integrated risk management ... it was our responsibility to bring all the stakeholders inside, [...] And nowadays it's more [our role] to coordinate all things together and to hold them together. (Interview - government)

fund is not linked to an earthquake insurance product.

From insurance to resilience

Double solidarity + Self-regulating + Interconnected

PGEs were originally cantonal fire insurers, with disaster insurance added from the 1920s → prevention historically important

The unique aspect of our system is that we cover three parts. We have prevention, we have intervention, and insurance. As we are public institutions, we can put obligations on policyholders to do protection measures. We do a lot of prevention work. With good prevention you have less damage. ... We supervise the fire brigades and so can make sure that they have the right equipment, the right education to do the work well and to limit possible damage. And the third part, the damage that occurs, we cover it with insurance. And this triangle is key to our system (Interview – PGE).

PGEs in prevention: Core roles

Financed via the premiums

- Training and partial financing of the fire brigades (250 millions CHF/year)
- Partial financing of post-disaster improvements (78 millions CHF/year)

So the basement got flooded several times and it's always the same scenario, water coming in through the front door or whatever. We can force them [policy-holder] to take action. And the client has only one choice, they can take that measure which obviously is subsidised by the public insurance company, or they can go uninsured and take all that risk for their own, which is a tough choice. (Interview - PGE)

PGEs in intervention: interconnected roles

Interfaces with building and land use permission process

If you want permission [to build], you need insurance. Then we look to see if this building has some dangers, and we insist that they adopt prevention measures, to build something different, a little bit larger, higher (Interview).

The public insurance companies are closely working together with the canton administration. So for example, if a homeowner applies for a construction permit, this never will go without knowledge of the public insurance companies. (Interview)

PGEs in prevention/intervention: informal roles

Collaborations with other organizations in the federal risk management framework, contributing risk assessment expertise. E.g.:

- collaborations on construction standard bodies;
- collaborations on risk maps;
- collaborations on infrastructure projects to limit losses

With the Federal government, with civil protection and alike, everyone knows what the role of the public insurance company is. So basically, this working together proved not to be a problem so far. (Interview, PGE)

An adaptive system

Solidarity without moral hazard: [The system] does really form this collective in the sense that since everybody has to pay a premium and it's normally the flat premium per canton, per building. ... And if you're in the red zone, you can stay there but [...] if you do alterations, they must be commensurate with the risk level, so you have to reinforce a building. And so again it's fair. ... You're basically forced to be part of the community ... it really helps the single individual to contribute and build his own resiliency, then it basically brings that individual into a community (Interview – stakeholder)

It works: The system in Switzerland is one of the best solutions as it has clearly actually shown to be very efficient to provide high insurance penetration at low costs and having positive impact on risk prevention and responsibilities the combination of prevention and risk financing, it's something unique (Interview –industry)

An evolving, not perfect system

The challenges of adaptation: 50 years ago Switzerland was able to stay away from more exposed zones, but today because of pressure of development, of the people and space is scarce in Switzerland ... And there has to be a trade-off. We definitely want to keep away from the most dangerous parts, but nonetheless floodplains with a return period of one in fifty or so are fully under construction now.

The challenges of solidarity: Earthquake “as we are a federal country with 26 cantons, with 26 opinions, we did not succeed to get it [...] too many cantons said no, we don’t want that” ... “the solution, even the price, it was very, very affordable” (Interview – Insurance Industry).

Moving towards adaptive resilience

The Swiss case

- Government provides a framework to prioritize societal goals
- Double solidarity
- Self-regulating competition and innovation
- Interconnected on prevention and intervention
- A collective system that expects individuals to be responsible, and enables them to take responsibility

A way forward for Australia?

Thank you.
Comments?