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IFoA GIRO Conference 2024

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UK Flood Insurance ... next steps (or strokes) toward a post-2039 solution

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Introduction

What we've covered previously...



... and what we're considering today

Purpose of today's talk

Advance discussion on how UK flood risk should be managed and insured in the future



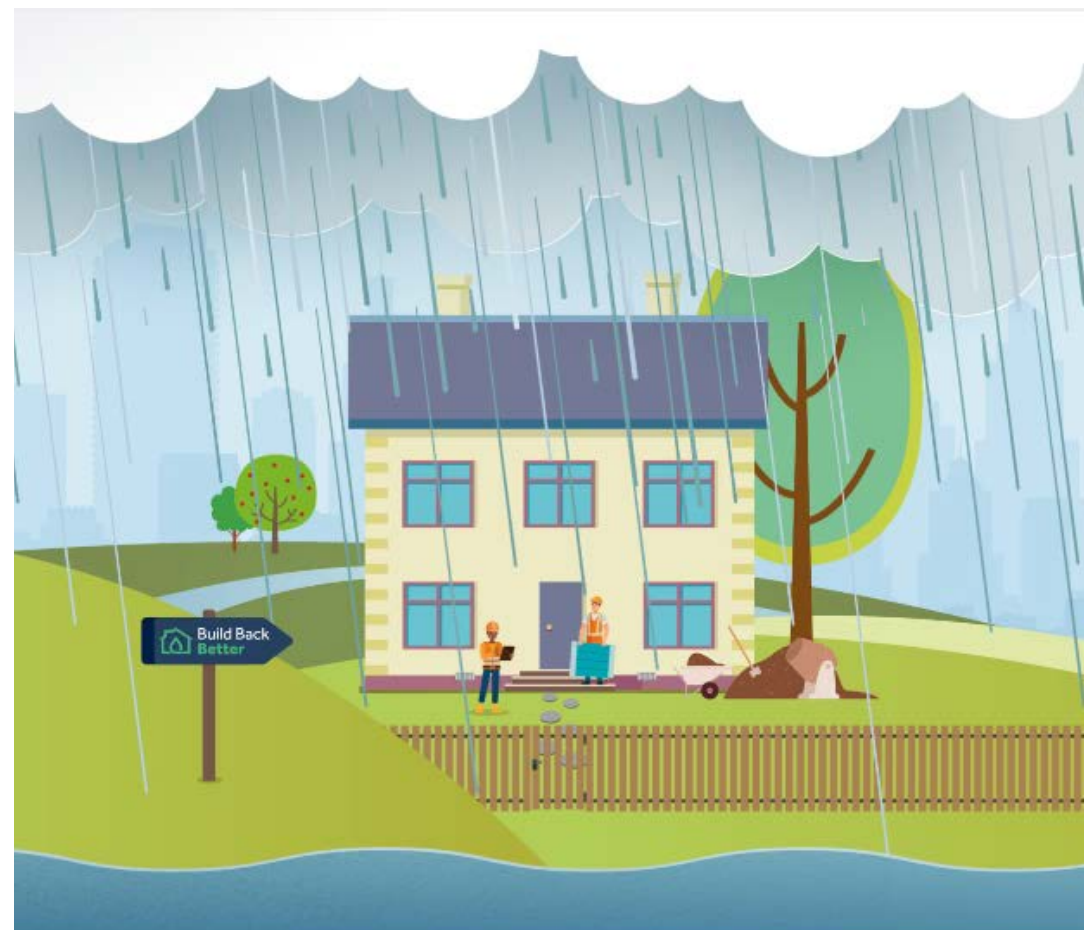
What we aim to cover:

- Brief recap of UK flood insurance and approach to flood risk mitigation
- Recent survey results on Flood Re awareness, potential future scheme coverage and risk-reflective pricing
- Learnings from other countries
- Resilience considerations, such as nature-based solutions
- Thoughts on potential solutions for post-2039

How Flood Re works

Flood Re is a reinsurer created to restore availability and affordability of UK home insurance for those at high risk of flooding

- Funded by:
 - Annual levy from all insurers writing home insurance
 - Premium charged to insurers for each policy they cede
- Some properties excluded from scheme:
 - Properties built after 2009
 - Second homes
 - Commercial properties
- Flood Re legislated to exit market in 2039

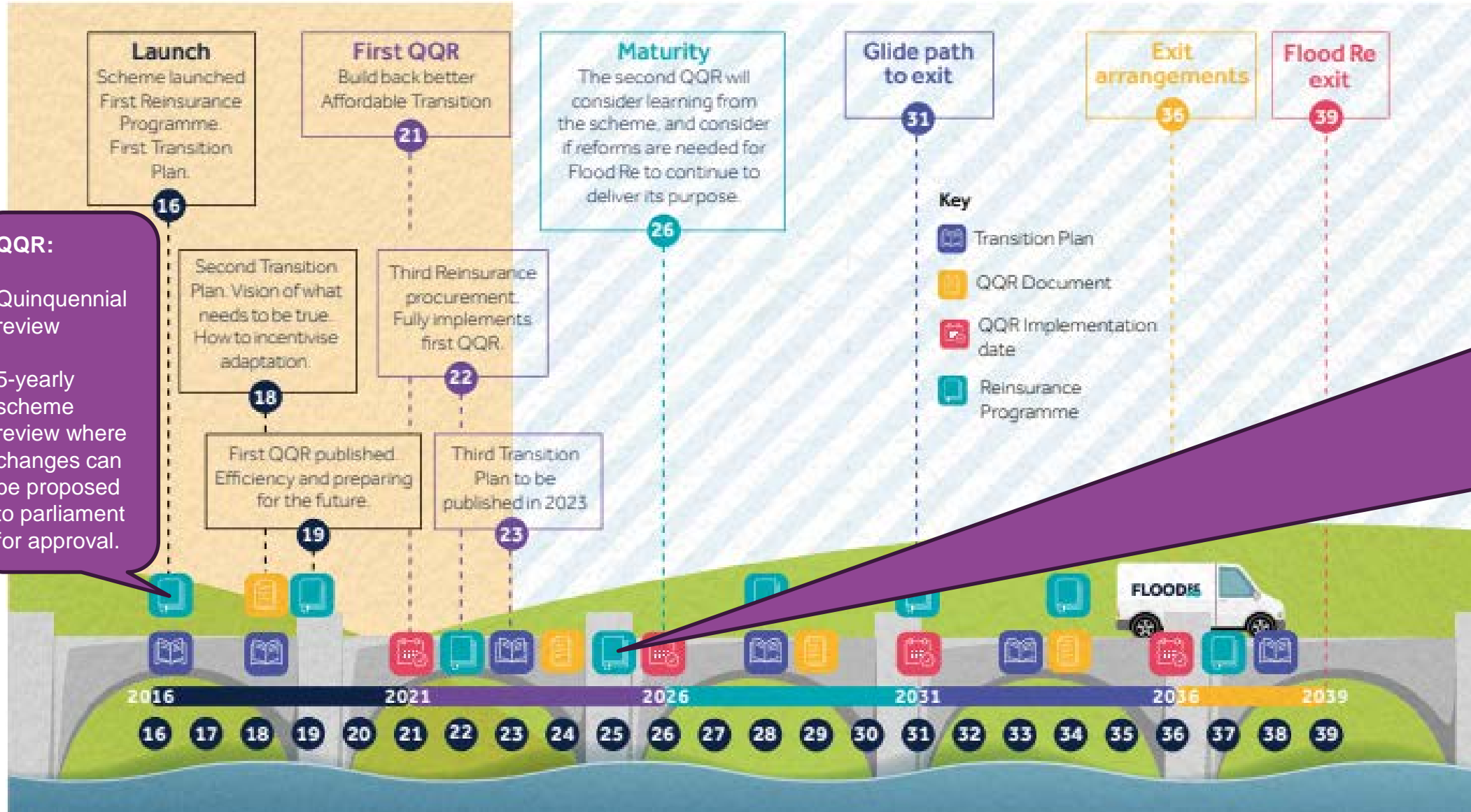


Flood Re facts: year to 31.03.2024



- Nearly 290k policies ceded to Flood Re
- Storms Babet and Henk were the most material flood events Flood Re has managed since inception in 2016
- 70% of UK market have committed to offer option of Build Back Better
- Amongst the claims received so far from Storm Babet, a third of those covered by Build Back Better policies are benefitting from additional money for flood resilient repairs

What's next for Flood Re?



QQR:
Quinquennial review
5-yearly scheme review where changes can be proposed to parliament for approval.

Transition plan:
Flood Re is required to 'manage, over the period of operation of the scheme, the transition to risk-reflective pricing of flood insurance for household premises'

Flood Re is obliged by statute to produce and publish a plan relating to the management of this transition every five years.

What is Flood Re's plan?

1

Reducing
flood risk

2

Reducing the
damage and cost
of flooding

3

Achieving an
effective market



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2024 Survey Results

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Survey approach, participation and awareness

Purpose:

- Get views on the current Flood Re model
- How flood risk pricing should/could evolve
- Views on what should come next for the UK after Flood Re exits in 2039

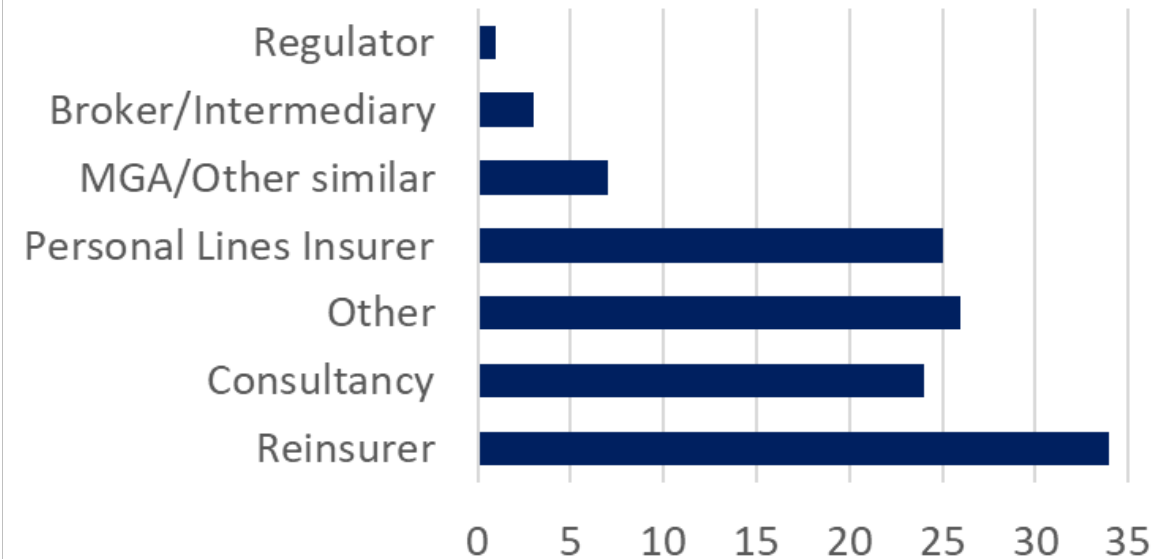
Participation

- 120 participants
- Wide range of backgrounds, but 75% GI and mostly UK

Most participants heard of Flood Re

- Only 40% indicated good understanding of how it works
- Limited awareness Flood Re legislated to cease in 2039
- 70% are more than mildly concerned about what will happen post-2039

Nature of Organisation Working for



Survey results: market intervention

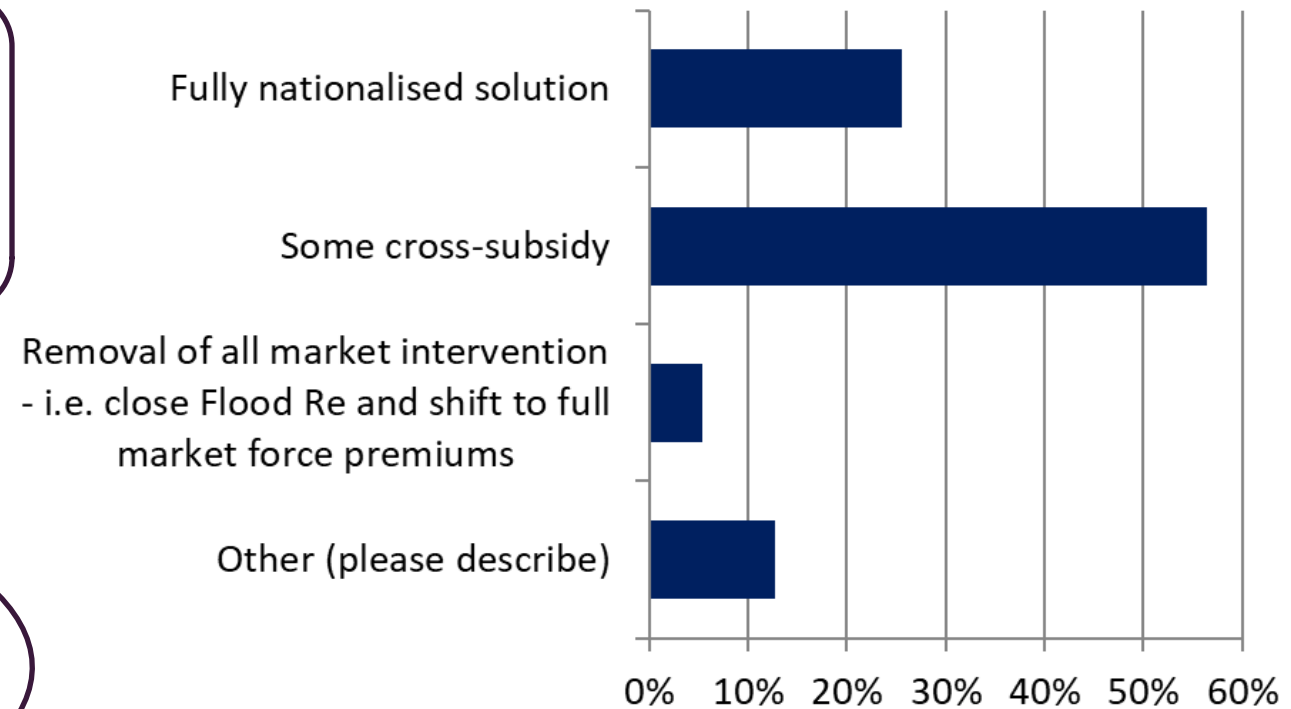
Do you think there should be market intervention in relation to flood risk insurance post-2039?

Sample responses under Other

Part nationalised solution supported by government policy framework

Reduce to zero over a time according to a schedule published in advance

I think there needs to be a balanced approach - some intervention needed, but also not complete underwriting of the risk to encourage adaption



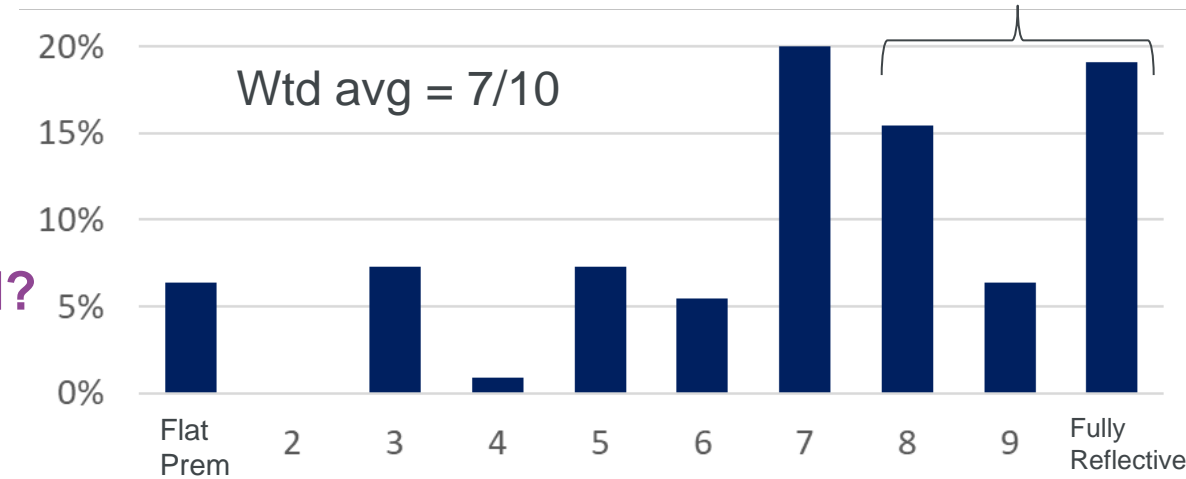
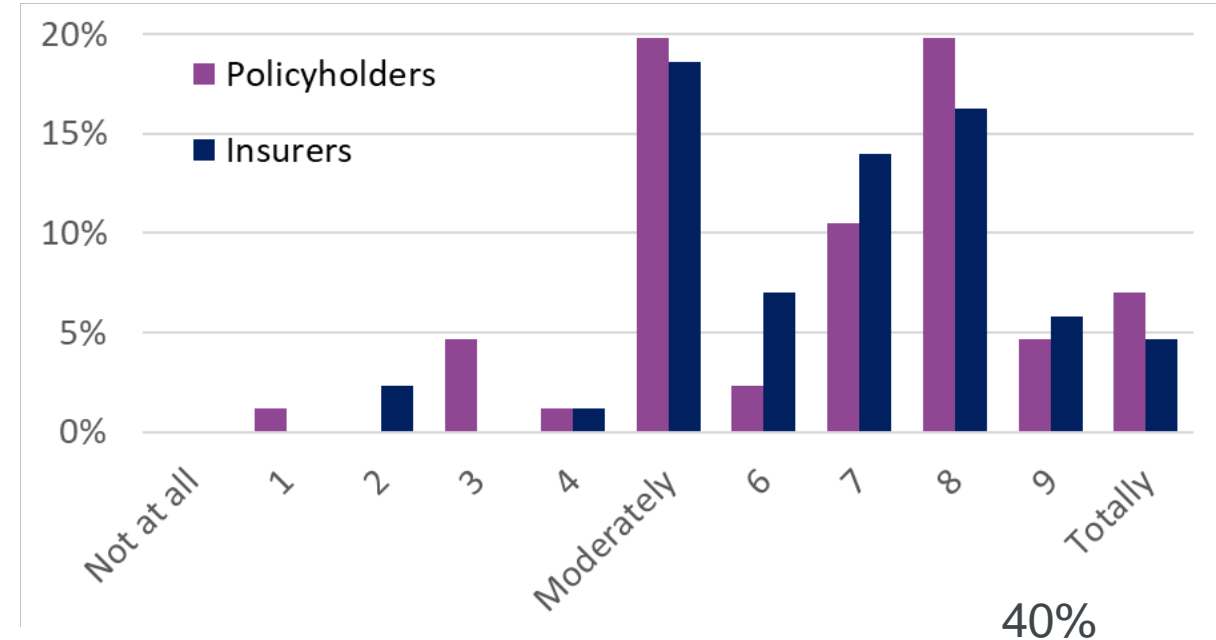
Survey results

How well does current solution meet needs?

- Weighted avg of 7 out of 10 for both

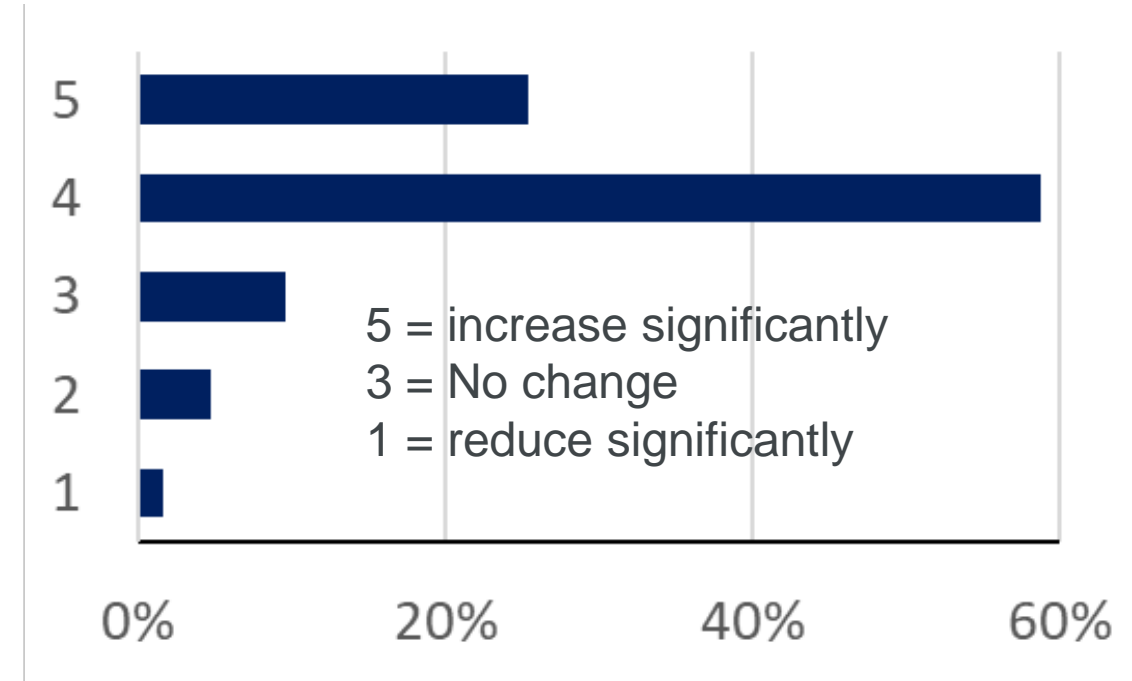
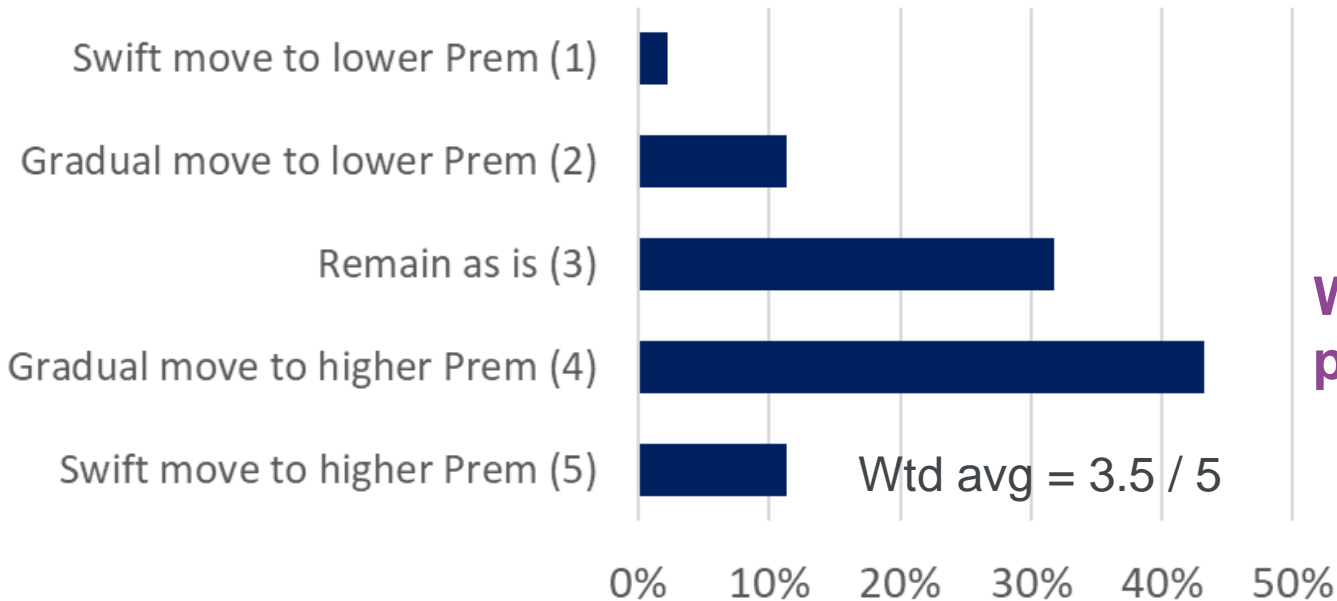
We didn't include a comments box on this question, so we're keen to receive feedback ... either at the end or after

To what extent should flood pricing for private homes be reflective of the perceived risk of flood?



Survey results: risk reflection

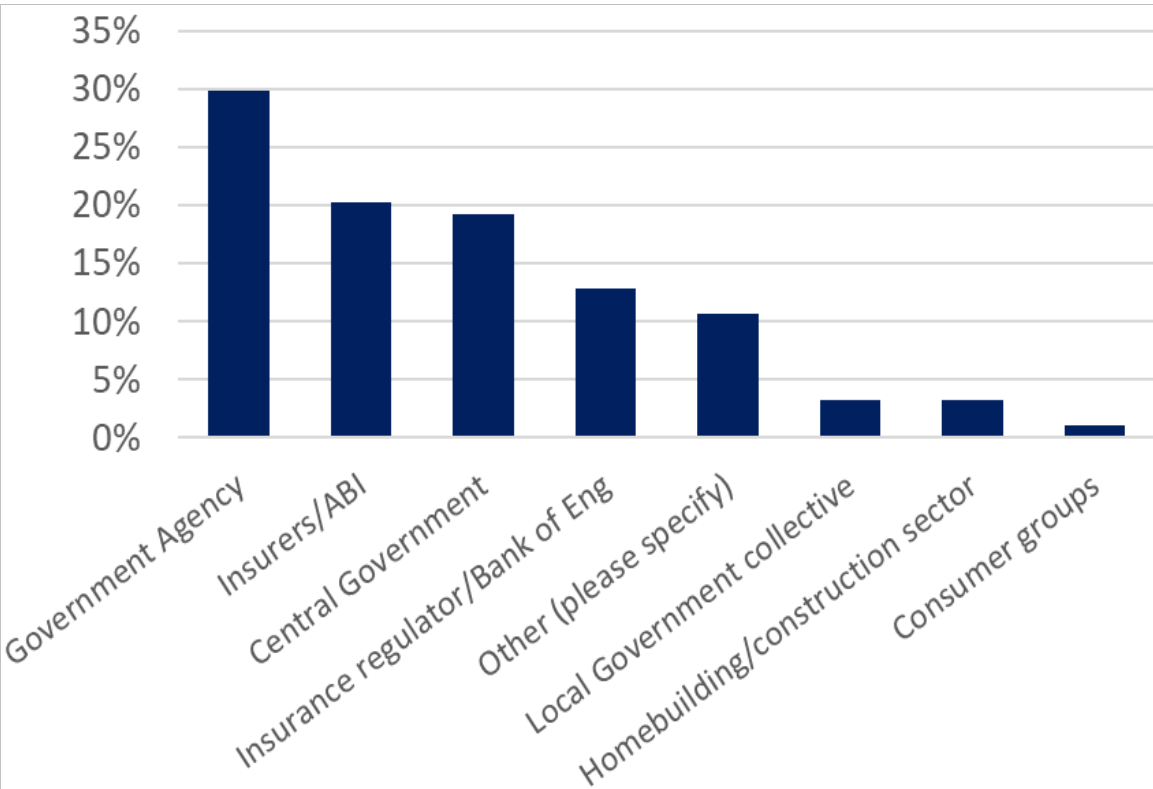
Do you think level of risk reflection in flood pricing should change over time from current level?



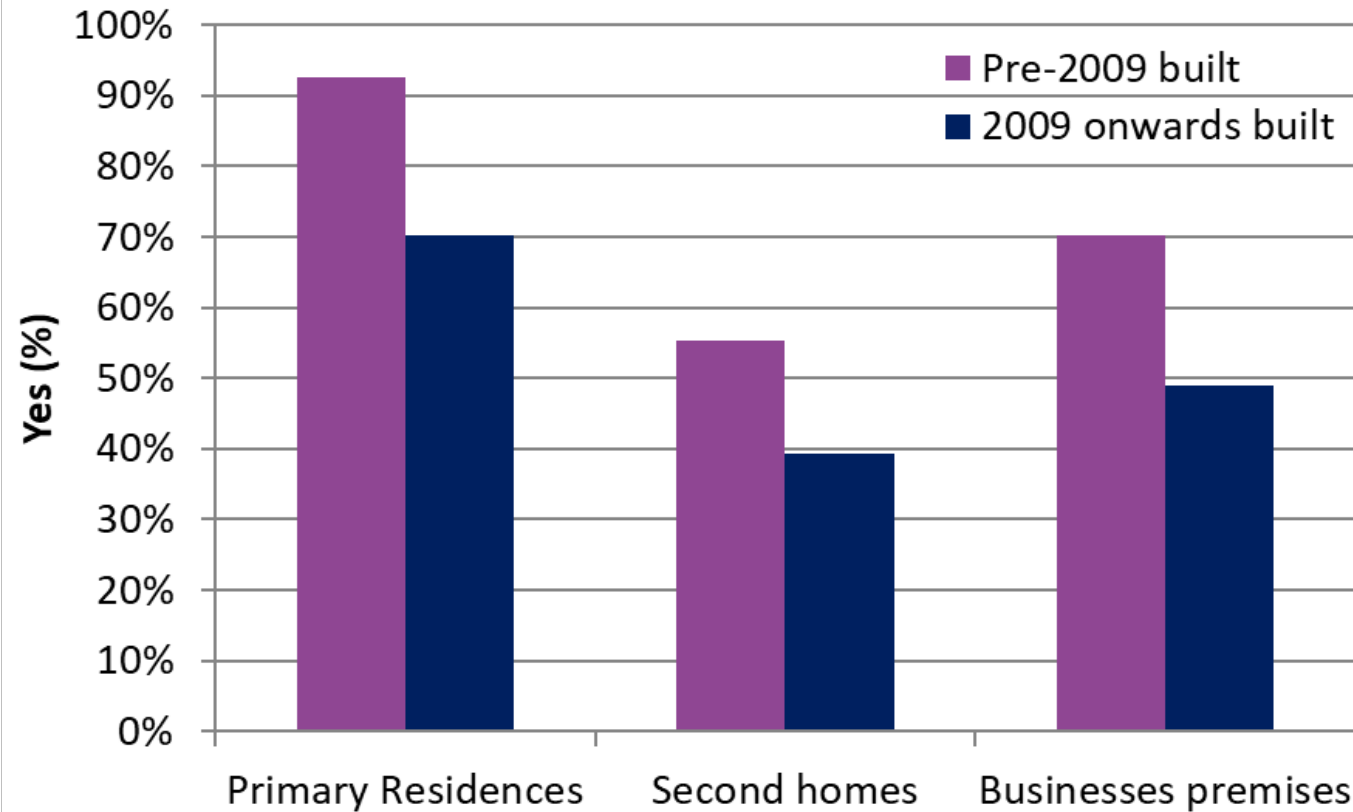
What level of support should be provided to policyholders going forward?

Survey results: solution leading and coverage

Which key stakeholder group do you consider best placed to lead the formulation of a Flood Insurance solution for post-2039?



Which of the following do you feel should be protected by any future market intervention for flood insurance?





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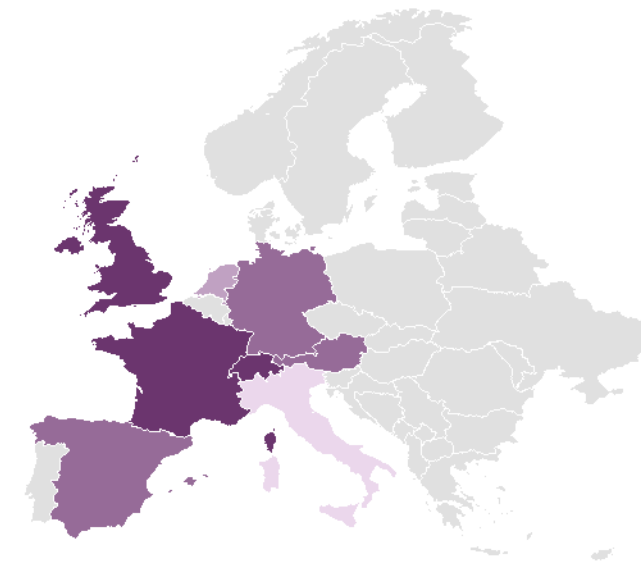
Insights from Other Countries

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What can we learn from other countries

Very different approaches elsewhere in Europe:

- Some have more emphasis on build quality and planning, with rules sometimes dependent on risk zone
- Some have more emphasis on collective vs individual, and have solidarity even without insurance
- Higher build quality and stricter planning rules may make flat rate pricing more socially acceptable
- Protection Gap still a problem across Europe, especially where insurance penetration low, or flood insurance not perceived as necessary



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Map shows countries we've looked at: UK, Switzerland, France, Spain, Germany, Netherlands, Austria, Italy. A darker purple colour indicates higher insurance penetration according to EIOPA's insurance protection dashboard 2023.



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Flood Resilience Considerations

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Other flood risk and resilience considerations

Nature based solutions

- In Sep 2023, the Environment Agency and Defra announced £25m funding for improving flood resilience, through a new NFM programme
- 40 projects selected so far across England: due to carry out variety of nature-based flood resilience measures up to Q1 2027, including:
 - NFM solution: e.g. wet woodlands and leaky barriers that slow / store high volumes of water in upper catchments, reducing downstream flood risks
 - Soil and land management, reducing surface water runoff
 - Expansion and enhancement of saltmarsh and sand dune systems - these natural barriers break wave action and reduce risk of tidal flooding





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Potential Solutions for Post-2039

Specific thoughts & prompts from Richard Stock

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Scene setting reminder

Insurance pricing for high flood risk homes influenced by Flood Re pricing

- Ensures many policyholders have affordable flood insurance available
- But ... reducing proportion and not businesses

Flood Re legislated to end in 2039

- “New” solution needed

“Smouldering” Platform

- Nationwide decision to stop granting new mortgages on some properties exposed to high flood risk*
 - Means some customers (including those most vulnerable) already potentially impacted



So new solutions may be needed sooner than we think!!!

* <https://www.theguardian.com/business/2024/apr/30/nationwide-stops-lending-on-some-flood-risk-properties>

The environmental reality

Many aspects of the UK flood landscape are outside Flood Re's sphere of delivery / activity, and the insurance industry is heavily invested in the current solution

- Many:
 - Years taken to establish the Flood Re scheme
 - £ invested in setting up Flood Re scheme and by insurers aligning their operations
 - Homes ceded to Flood Re each year, protecting policyholders
 - New homes continue to be built on flood plains
 - £ have been and continue to be spent by Govt on flood defences
 - Improvements have been and continue to be made in flood risk modelling



*Analysis reveals 1 in 13 (8%) – almost 110,000 – new homes in last decade built in flood zone**

* [News release: One in thirteen new homes built in flood zone](#)

Funding / Controls / Politics: key points

Central Govt:

- Determines level of funding and support for UK flood defences
- Controls the legislative and regulatory landscape

Local Govt (supported by central Govt) determines where and how new homes are built:

- Many homeowners buy homes on the understanding that flood risk is being adequately managed

Builders build homes to make a profit:

- Based on rules set by Govt

Insurers underwrite claims risk to make a profit:

- Based on risk environment heavily influenced by Govt

In short, Govt is in the driving seat for managing future Flood Risk ...

... but needs encouragement and support to help recognise and understand the issues

Potential solutions: joining things up

Many strands to join up

- Home-building needs
- Cost of building and maintaining flood defences: river/coastal flood defences, existing urban drainage
- Latest flood modelling information and insights

Collaborative approach, led by Govt?

- Govt could set-up an independent task force (or designate an existing entity)
- Probably not Flood Re, as need to avoid perception of self-perpetuation

Evolution vs revolution?

- Flood Re solution imperfect, but survey suggests it works well enough
- Affordable cover is available for many, and the cross-subsidy is relatively limited in overall terms for most

Flood Re
Mark 2?



Potential solutions: key features

Shift towards:

- Increased risk reflective premiums ... but important to cap the year-on-year change
- Protection needed for businesses as much as homeowners
 - Perhaps all homes and businesses ... no exceptions?
- A much more risk reflective position
 - But mitigation needed for exceptional overnight impacts – e.g. model changes / unexpected impact of development

Potential funding sources

- Developers to fund flood defences and mitigations up front and an additional levy for future maintenance
- Insurers to continue to fund in the current way
- Potentially still an element of funding from Govt ... **"Skin in the game"**

Decisions on flood defence spending
need to take account of downside
risk of not building them

Questions for audience

Here are a few questions we're keen for you to consider and feedback on

Q1. In what way(s) does the current solution not meet insurer needs?

Q2. In what way(s) does the current solution not meet potential policyholder needs?

Q3. What improvements would help meet needs better?



Questions



Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



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Appendix

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Survey results: Individual comments with brief responses

- Is council tax band really the best measure or should alternatives e.g. Sums Insured play a bigger role?

Council tax band is simple, available, objective. The purpose of the cap is to reflect the value of the home rather than level of risk ... if you can afford a more expensive home and council tax then you can afford a higher insurance cap

- It's for society to decide, not actuaries

I don't think anyone's suggesting actuaries decide ... ultimately it's a Govt (society) decision, but actuaries are probably as well placed as any to help decision makers understand the issues well

- property owners should pay the cost of flood prevention measures / the full insurance value or they should expect the value of their property to depreciate to zero

Property owners have no influence or control over flood defence management, the impact of other development on their flood risk, climate change or how flood models are parameterised

Survey results: Individual comments with brief responses

- There needs to be much better awareness of the cost of insurance and availability of cover for flood for people buying a property

Raising awareness is always helpful. However, the cost and availability of cover for flood can change significantly over time and in unexpected ways, most of which are outside the control of homeowners

- Introduce within the house selling process an independent flood risk survey

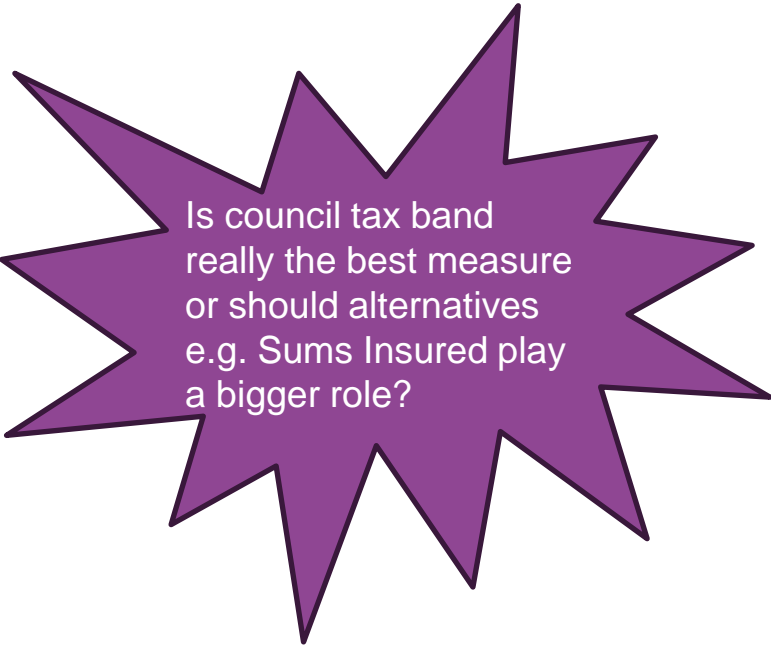
There are typically many varying views on flood risk, depending on the information available and model used. The survey would reflect one of many potential views at a single point of time

- Flood resistance / resilience must become mandatory & form part of agreed building regulations in UK particularly for all new homes where they will be on known flood plains

Maintenance of community flood resilience measures by local and central government / agencies will be at least as important as installing them in the first place

Survey results: Other interesting comments

We received a number of interesting comments...

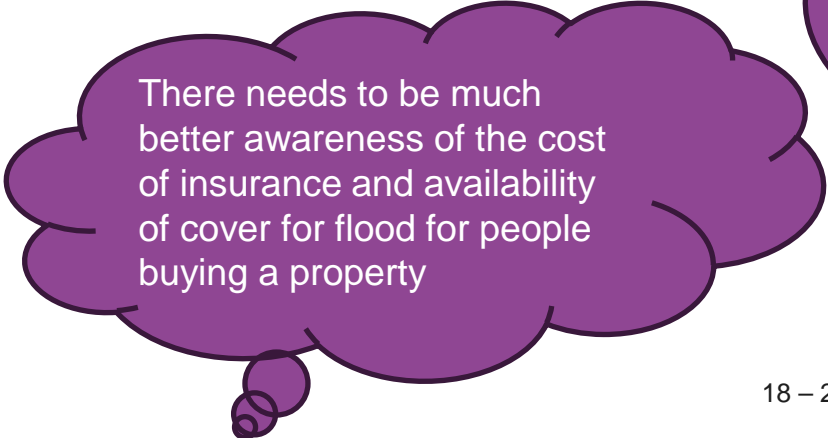


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Features of flood insurance in other European countries

- Emphasis on build quality and planning, to keep risk low in the first place.
 - E.g. Austria, different regulations by state.
 - Local government publishes information to benefit residents: flood maps, early warning information, current water levels.
 - Guidelines or checklists on what you can/can't do by risk zone (e.g. 30-yr flood zone, 100-yr flood zone, etc.)
 - Work with an architect to get the build design right in the first place. Completed checklist available to subsequent property owners.
 - Contrast with UK approach – Flood Re unavailable to newbuilds, so hope the market offers suitable housing.
- Possibility of not building back at all.
 - E.g. Switzerland, cannot rebuild in very high risk areas (rules vary by canton).
- Solidarity without insurance:
 - E.g. Austria has low flood limits (€3,000-€10,000) for a standard home insurance policy.
 - Each State has catastrophe funds, e.g. Niederösterreich compensation rate was 20%, but increased retrospectively to 50% following Storm Boris flooding, and up to 80% in cases of hardship.
 - Cover is never 100% - people expect to incur some loss themselves and are incentivised to ensure their homes are well-protected.
 - Retrospective increase suggests what was in place was not sufficient for what happened.
- Italy has low levels of insurance penetration:
 - Italians tend not to buy insurance.
 - Occasionally required for mortgages, but extension to flood and earthquakes is optional.
 - Historically 97% of losses for flood (and 97% of losses for earthquake) uninsured.

Features of flood insurance in other European countries

Country	Insurance pricing	Insurance coverage mandatory by law	Required by banks for mortgages	Insurance penetration estimate
Austria	Risk-based	No	No	50%-75%
France	Flat rate	Yes	Yes	75%-100%
Germany	Risk-based	No	No	50%-75%
Italy	Risk-based	No	No	0%-25%
Netherlands	Risk-based	No	Yes	25%-50%
Spain	Flat rate	No	Yes	50%-75%
Switzerland	Flat rate	Yes	Yes	75%-100%
UK	Mixed	No	Yes	75%-100%

Data sources:

- UK: Flood Risk Management in England, Geneva Association 2020:
<https://www.genevaassociation.org/sites/default/files/flood-risk-management-england.pdf>
- Switzerland: Disaster Insurance in Switzerland, P. Jarzabkowski et al. 2022
https://www.paulajarzabkowski.com/dimg/downloads/ENGLISH_DISASTER_INSURANCE_IN_SWITZERLAND_THE_CANTONAL_PUBLIC_SECTOR_INSURER_SYSTEM_1.pdf
- All other countries: EIOPA Dashboard on insurance protection gap for natural catastrophes, 2023 update: https://www.eiopa.europa.eu/tools-and-data/dashboard-insurance-protection-gap-natural-catastrophes_en

Other flood risk and resilience consideration

Nature-based solutions (NFM)

- <https://www.bbc.co.uk/news/articles/cw0vnkp8rzro>
- Slow-down of flood water via nature-based solutions provides affected individuals and communities more time to prepare
- Reduction in flood water levels
- "Managing future climate risks by building bigger defences will not always be the right approach. We need to use all the tools available, including nature-based solutions. This is particularly the case as the changing climate causes more frequent, intense flooding and sea level rise."
- <https://www.gov.uk/guidance/use-nature-based-solutions-to-reduce-flooding-in-your-area>
- <https://naturalprocesses.jbahosting.com/Map>
- <https://www.bbc.co.uk/news/articles/c51ngn55gz4o>

