

# **Panel 4: Flood insurance and adaptation: What can the US and EU learn from each other?**

## **Flood Insurance: Comparison of the US and UK**

**Michael McShane, Old Dominion University  
Diane Horn, Birkbeck College, University of London**



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# **Questions to Discuss**

- **How can individuals be encouraged to buy flood insurance or lenders encouraged to require purchase of flood insurance?**
- **What are the social, political, and economic implications of charging fully risk-based rates for those in high risk flood zones?**

# Flood Insurance: Can Vary Drastically by Country

**Limited flood insurance**

**Netherlands**

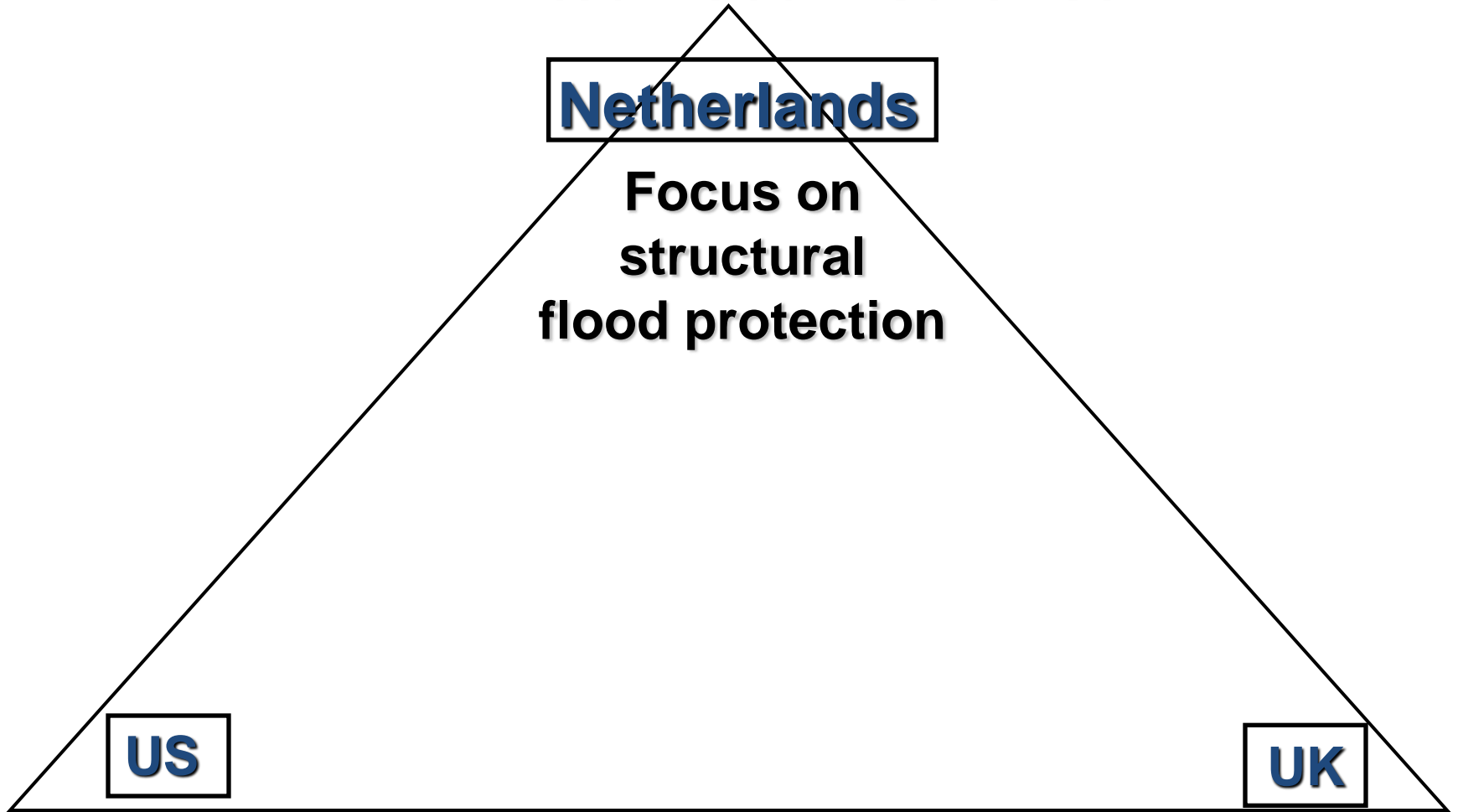
**Focus on  
structural  
flood protection**

**US**

**UK**

**Public:  
government run**

**Private:  
insurance industry run**



# US and UK:

## Opposite across multiple dimensions

	US	UK
Public / private	Public	Private
Statutory	Yes	No
Disaster assistance	Yes	No
Bundled / separate flood coverage	Separate flood policy	Bundled with other perils
Required for mortgage	Only in SFHAs	Yes (because bundled)
Penetration rate	Low	High
Subsidized / actuarially sound rates	Subsidized but changing	Subsidized but changing
Insurance rates linked to property-level resilience	Yes	No
Insurance linked to floodplain management	Yes	No

## **US: Public**

- **Most flood insurance is provided by a Federal program.**
- **National Flood Insurance Program (NFIP)**

## **US: Statutory**

- **National Flood Insurance Act passed by Congress in 1968.**
- **Updated periodically**

**US: Federal government provides  
disaster assistance after major flood events.**

**US: A main goal of the NFIP is to rely more on insurance to cover losses and less on disaster assistance.**



## **US issue: Disaster assistance**

- **Moral hazard: “charity hazard” affects flood insurance purchase decision of property owners**
- **US federal government provides billions in disaster aid after flood events.**
- **Why buy flood insurance if disaster aid will flow?**

**Result: Low flood insurance penetration rate in US.**

## **UK: Private**

- **Flood insurance is provided by private insurers**
- **Government is not involved**

**UK: Government does not provide disaster aid to individuals**

**Financial cost of floods borne entirely by the private sector (insurers and property owners).**

## **UK: No legislation**

- **‘Gentleman’s Agreement’ between insurers and government.**
- **Nothing that can be enforced.**

**UK issue: Moral hazard affects flood risk decisions by government.**

- **Less incentive for government to reduce flood risk**

- **US: Flood coverage is a completely separate policy from other perils.**
- **Other perils are covered by property insurance, such as homeowners' policy, from private insurers.**

## **US issue: Separate flood policy**

- **After flood event, many are “surprised” that their homeowners’ insurance does not cover their flood damage.**

## **US issue: Separate flood policy**

- **Slab suits: wind vs water**
- **Who pays in US? NFIP or private insurers?**



# US: Flood insurance required for mortgages?

- Only for high risk properties
- Federally regulated lenders must require flood insurance on properties in flood zones.
- *Flood zone: 1% annual chance of flood*

# **US Issue: Flood insurance required only for high risk properties**

## **Negative Results:**

- **Adverse selection:**
  - **Insurance pool with mainly high risk policyholders.**
- **NFIP is \$28 billion in debt.**

# **US Issue: Flood insurance required only for high risk properties (*continued*)**

**Result: Low flood insurance penetration rate**

- **Mystery: Why do lenders require homeowners' insurance but not flood insurance?**
  - **Even when required in many cases?**

**UK: Flood coverage is bundled with other perils in standard property policies by private insurers.**

**No separate flood policies.**

## **UK: Advantage of bundled perils**

**Wind vs water not a problem.**

**But homeowners may not know their flood risk.**

## **UK: Advantage of bundled perils:**

**Lenders require property insurance, which includes flood.**

**But floodplain not defined for insurance.**

**UK: High penetration rate since bundled with other perils.**

- **High penetration rate for homeowners with mortgages.**
- **Lower penetration rate for renters.**

# **Subsidized vs. actuarially sound rates**

- **US: Some properties heavily subsidized.**
- **Ultimately by US taxpayers.**

**Subsidies will end under Biggert-Waters Flood Insurance Reform Act of 2012.**



# **Insurance rates linked to property level resilience?**

- **US**: Yes, insurance rates are lower for properties that have invested in lowering flood risk.

**US: Investment in improved building standards increases resilience.**

# **Insurance linked to floodplain management by communities?**

**US: Yes.**

- **Property owners in a community can buy flood insurance only if the community has met basic floodplain management standards.**

# **Insurance linked to floodplain management by communities? *(continued)***

## **US Community Rating System:**

- **If community exceeds basic floodplain management standards, property owners get increasing discounts on flood insurance.**

# **Subsidized vs. actuarially sound rates**

- **UK: high flood risk properties subsidized by low flood-risk properties and other perils**
- **Not subsidized by taxpayers.**
- **Flood Re: subsidies will end over 20-25 years.**

**UK: No link between insurance and type or location of buildings in the floodplain.**

**No incentives for communities.**

- **UK: No incentive for home owners to improve property level resilience.**

- **How can individuals be encouraged to buy flood insurance or lenders encouraged to mandate purchase of flood insurance?**

**Lesson from the UK:**

**Flood insurance penetration is high because flood is bundled with other perils.**



- **How can individuals be encouraged to buy flood insurance or lenders encouraged to mandate flood insurance purchase? *(continued)***

**Bundling could solve US issues:**

- **Lenders require standard property insurance for all mortgages, but not flood-only policies.**
- **Overcomes the adverse selection problem.**
- **Overcomes the charity hazard issue.**
- **Overcomes the issue of property owners thinking that their homeowners' policy covers flood damage.**

**What are the social, political, and economic implications of charging fully risk-based rates for those in high-risk flood zones?**

- **Only the wealthy can afford desirable coastal property?**
- **Low income floodplain residents cannot afford flood insurance?**
- **Blight and abandoned property in less desirable floodplains?**
- **Loss of property tax revenues for communities?**

# The ideal flood insurance program?

- **Best parts of US and UK flood insurance schemes:**
  - Flood bundled with other perils in a single property policy.
  - Insurance rates for policyholders linked to:
    - Extent of floodplain management by the community.
    - Extent of mitigation by individual property owners.
- **Almost actuarially-sound rates but with some subsidy:**
  - The many low risks pay a small amount to subsidize the few high risks.
  - High risks still charged enough to encourage risk mitigation.

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