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# WHO PAYS WHEN HOMES FLOOD?

**Kristian Krieger and David Demeritt** discuss market solutions to flooding in response to this year's record breaking rainfall in the UK.

David Cameron's government has struggled to get a grip on the flooding caused by record rain which damaged almost 6,000 homes across England and left the Somerset Levels under water for months. The Prime Minister was heckled during a Boxing Day walkabout with flood victims in Kent when he donned his wellies to play commander-in-chief for the cameras. As ministers squabbled over who was to blame, the Army was dispatched to fill sandbags, and the Prime Minister repeatedly pledged, *"money is no object"*.

The UK government has promised to provide all affected households and businesses with £5,000 "repair and renew" grants. It also suspended council taxes for affected properties, delayed business tax collections, and leaned on a number of government-owned banks bought up during the bailout to provide a £750 million package of interest-free loans.

Critics dismissed these measures as a pre-election give away to Tory voters. Having largely sat on its hand as Hull and other Labour strongholds on the east coast were flooded in early December 2013 in the worst storm surge since the deadly flood of 1953, the government is accused of acting only after the proverbial effluent hit the affluent in the Tory shires.

Focusing on the partisan politics of the government's aid programme overlooks how radically the Government response to the flooding departs from long established arrangements for funding flood damages. For more than 50 years, successive governments in Britain have insisted that "there would be no government help or compensation for households hit by flooding … We are leaving it to the operation of the free market" (*Sunday Times*, 1 May 2003). This was the line taken by the Blair and Brown governments just, as a generation before, ministers of the day told the House of Commons: "the taxpayer is entitled to expect the individual to insure his own property and not to rely on private contributions or Government compensation in the event of loss or damage" (House of Commons, 13 October 1969).

By contrast, the current Coalition Government has not only pledged to provide direct government aid to the victims of this year's floods, it is also intervening in the private insurance market with legislation to subsidize the costs of flood insurance for those in high risk zones.

### The problem: Increasing flood losses

Floods have become more frequent and more damaging in Europe over the last 50 years. In 2000, England experienced the first flood that broke the threshold of £1 billion losses and the costs of the 2007 floods were put at £3.2 billion. Though estimates for this past winter's flooding are still coming in, damages are likely to top the £1 billion mark. Whether caused by climate change or simply being exposed, what is clear is that for individual households flooding is devastating. There is a need to establish a collective mechanism for financing flood damage.

### Flood insurance or government aid, which works better?

Collectivizing the cost of flood disasters through government aid often carries macroeconomic costs, such as deferred public investment or tax increases, and creates a moral hazard. If individuals know they are likely to get help from government, why would they seek to avoid and mitigate risk? The European Commission's recent green paper advocates market-based insurance as a solution to the challenge of paying for flood damages while also incentivizing risk reduction. Private insurance is supposed to generate a virtuous circle of financial protection – funded by collected premiums – and overall loss reduction because high priced flood cover encourages property owners to undertake risk mitigation measures, like flood proofing their homes or moving valuables to higher ground in response to a flood warning.

There are difficulties with this model of private insurance. Flood losses tend to be concentrated in time and space, taxing the ability of insurers to spread losses and remain solvent. Nevertheless, the reinsurer Swiss Re remains confident that *"floods are insurable"* (Swiss Re 2002), if they are priced properly. But with insurance priced on the basis of risk, many of those in greatest need of protection may be unable to afford, or even obtain insurance.

There are other demand-side challenges as well. The public tends to underestimate the risk of flooding, and so demand for flood insurance is often low and restricted to those most likely to be flooded. Because of 'adverse selection', insurers find it hard to spread risk across the pool of those buying flood insurance, driving prices up and demand down, so that when flooding does strike many of those affected are unprotected.

Public protests about the affordability of insurance and the devastating costs of flood disasters can lead governments to intervene in insurance markets in ways that undermine their prudential logic of risk reduction through risk-based pricing. We look at three country cases in which risk-based approaches to flood damage financing have been tried, but for political reasons have failed to take off.

### Three cases, England, Germany and the US

*England*

Privately purchased insurance has long served as the collective mechanism for funding individual flood losses. England's flood insurance market used to depend on an informal Gentleman's Agreement. Insurance companies promised to provide affordable flood cover regardless of risk if government would reduce the risk through flood defence spending and turn a blind eye to a cartel arrangement among insurers to make flood cover a standard part of household insurance rather than being sold as a separate product.

Faced with rising losses in the 1990s and 2000s, insurers pressured government to replace the Gentlemen's Agreement with the "Statement of Principles", which allowed insurers to discriminate more sharply on the basis of risk. They raised prices for high risk properties, increased excess limits and refused to provide cover to the most flood prone areas, prompting howls of protest from affected homeowners.

In response, England's insurance industry and the current government agreed to set up FloodRe, a non-profit scheme that enables properties in high risk areas to obtain flood cover at subsidized rates. A privately-run organisation, it is funded through a levy on FloodRe's member insurance companies amounting to £180 million per year. This scheme fails to provide incentives to reduce the overall loss potential from high risk properties. Moreover, FloodRe is formally set up to last for 25 years with a view to being replaced by a purely risk-based flood insurance after its expiry. But it is not clear that an exit from the scheme will be politically feasible, especially since the number of high risk homes needing subsidy is likely to rise with climate change. FloodRe serves a political function. It takes cares of the negative publicity that comes with increases in premium rates in high risk areas and later demands for government aid when affected households are left to their own devices.

*Germany*

Financing flood damage has been a purely private matter since the early 1990s when the liberalization of insurance markets under EU law opened up regional monopolies for insuring natural perils. Until the late 1990s, insurers were reluctant to promote flood cover (part of a general natural perils product) because they did not have adequate tools to assess flood risk. After the Odra 1997 floods, the industry collectively developed a flood map and was able to promote flood cover more actively. Still, in spite of increased efforts by insurers, the share of households covered in Germany remains low at less than one in three. One important reason is that the government provided generous disaster aid to private households after three major flood events in the past 15 years (1997, 2002, 2013), which reduced the incentives for households to purchase separate flood cover on the open market.

Government intervention was motivated by political gains. Most notably, in 2002, then Chancellor Gerhard Schroeder promised that *"no-one should be worse off than before the floods"* and stormed to victory in the autumn elections having trailed in the polls for most of the year. In 2013, Chancellor Angela Merkel repeated the *"successful"* example of 2002, which paved the way to her winning a third term as Chancellor, amidst the best showing for her party in more than 20 years.

## THE UK'S RESPONSE TO THE FLOODING DEPARTS FROM LONG ESTABLISHED ARRANGEMENTS FOR FUNDING FLOOD DAMAGES.

*United States*

Financing flood damage in higher risk areas is managed through the federally funded National Flood Insurance Programme (NFIP). Under the NFIP, residents of designated "special flood hazard areas" can purchase subsidized insurance from the government if their communities agree to adopt tighter building codes and land use regulations to reduce flood risk. A further incentive is that any communities identified as being at risk but not enrolled in the NFIP are denied access to Federal ad hoc disaster aid in the event of a major flood.

In spite of its formal risk control requirements, the NFIP has accumulated a significant debt vis-à-vis the US Treasury. Part of the problem has been losses from hurricanes like Katrina (more than 40 per cent of the $38 billion in claims paid by the NFIP since its creation in 1968 has gone to hurricane prone states of Louisiana, Texas, and Florida). But the deficit is also blamed on low premium charges and the NFIP's failure to encourage individuals (on subsidised rates) and communities (required only to introduce but not to enforce strict land use controls) to reduce flood risks.

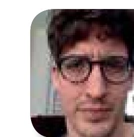
In 2012, the government adopted the Biggerts-Waters Flood Insurance Reform Act to gradually bring premiums into line with actual risk, reduce subsidies for insurance premiums on second homes, and remove so-called severe repetitive loss properties. After the swift backlash from communities facing steep rises in their insurance premiums, a bi-partisan coalition of Congressional representatives succeeded in rolling back the reforms. In March 2013, President Obama signed a bill capping rate increases at a lower level and providing refunds to homeowners who had already incurred higher premiums as a result of the 2012 reforms.

### Outlook

Decision-makers face difficult choices. Current arrangements for financing flood damage costs are already under strain, and with flood losses rising and the global climate changing, there are questions about their future viability. In this context, the prudential logic of insurance requires premium rises to price in the increased risk and incentivize risk reduction. While this may be economically rational, it has proven politically difficult, because there are electoral rewards for political interventions that undermine private insurance. In short, good politics is bad economics while good economics is bad politics.

### References

Swiss Re (2002). *Floods are insurable!* Focus Report. Zurich: Swiss Reinsurance Company.



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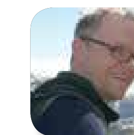

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