Institute and Faculty of Actuaries

The future of UK flood policy

Policy summary

Executive Summary

The Institute and Faculty of Actuaries (IFoA) is the chartered professional body for actuaries in the UK. Actuaries use financial and statistical techniques to solve business problems, particularly those involving risk. These business problems involve looking at future events, the likelihood of them happening, when they might happen and how much money will need to be put aside to cover costs should the event happen.

Actuaries are employed in a number of fields, including general insurance where they play a crucial role in pricing, data analysis and modelling. Through this work, our members have a unique insight into the UK flood insurance industry.

Here we set out a number of recommendations for policymakers to consider in the context of the Flood Re scheme and the current flooding policy landscape:

- More needs to be done to ensure that flood defences are strengthened and resilience is improved whilst the Flood Re scheme is in place. Flood Re provides valuable breathing space, but all parties should remember that it is a temporary measure rather than a long term solution and that, as long as high flood risk persists, an affordable market based on risk-reflective pricing is unlikely to be achieved.
- Increased spending on flood defences is necessary, but is only part of what is required to ensure homes and businesses are sufficiently equipped to cope with future flooding. There is a need for more joined up thinking between government, environmental organisations, planners, homeowners and the insurance industry to help to manage the risks associated with flooding.
- A workable, proactive, long-term strategy for dealing with flood risk needs to be executed in time for Flood Re's transition plan to be a success for industry and customers. This means dealing with the root causes of flooding, and implementing a strategy that recognises the changing nature of flood events and the potential further impact of more frequent and extreme weather events.

Evolving risks and the future of insurance

The future of UK flood policy

The problem

Climate change, population growth and inadequate investment in flood defences have all exacerbated the UK's flooding problem in recent years. Weather events continue to become more extreme and frequent while UK infrastructure is grappling with a growing demand for housing. The Committee on Climate Change predicts that between 1 and 1.3 million homes could be in areas of high flood risk by 2050 if global temperatures continue to rise as expected.[i] Growing demand for housing has caused housing developers to continue building on flood plains, causing increased surface water runoff and placing additional pressure on infrastructure. This places new and existing homes at higher risk and has caused more homes to experience flood damage in recent years.

This has all had serious implications for the UK flood insurance market. The damage caused by flood water can be disruptive and costly for those affected, and many individuals, families and businesses rely on insurance to help cover the costs of repairing a home after a major flood event. During the 2015 winter floods alone, insurers received 22,000 claims and paid out an estimated £1.3bn to those affected.[ii]

Flood events, as well as having consequences for homeowners, also have the potential to seriously impact the profitability of insurers.

Over time flood modelling has become increasingly sophisticated with insurers obtaining flood models showing flood risk information at postcode level, and in more recent years at individual property level. As the household insurance market has become more competitive, insurers are no longer able to absorb the costs of high flood risk properties by using profits from low flood risk properties in years which experience a notable flood event. In addition, flood events have become more frequent and severe. As such, both homeowners who had been flooded before, and those who insurers believe to be at high risk of flooding in the future, have been subject to large premiums and high excesses. With an increasing number of homes affected by this affordability issue, the government and the insurance industry have worked together to create a short-term solution.

The short term solution

Flood Re is a scheme funded by a levy on insurers that reinsures their customers' flood risk, allowing them to offer flood insurance to those homes at risk at a more affordable price.

One of the most important aspects of Flood Re is that it provides time for insurers, the government and homeowners to address deficiencies in planning policy, invest in flood defences and improve the resilience of housing stock.
The scheme is intended to be operational for 25 years, during which time there will be a role for central and local government, the insurance industry, environmental organisations, housing providers and homeowners in tackling flood risk. After this 25 year period, the Flood Re scheme assumes that improvements in flood resilience, as well as more sophisticated and readily available flood data will leave the insurance industry in a position to offer more affordable cover in a risk-reflective free market.

Properties built since 2009 are not eligible for Flood Re, which in theory should introduce pressure on planners to fully consider flood risk before new homes are built. However there remains a challenge in ensuring that a new property's flood risk is properly communicated both to the buyer and the insurance industry, so that both parties can avoid any shocks further down the line.

As well as providing a period of breathing space for industry and policymakers, Flood Re also intends to provide a point of focus for the next 25 years, to continue the debate about addressing the root of the environmental and planning issues. But the inescapable realities of climate change, coupled with a seeming lack of a long-term approach to investment in flood defence measures means that the success of these ambitious plans is far from guaranteed.

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Measuring success

Flood Re is required to produce a transition plan every five years to review its role in the move back to risk-reflective pricing of household insurance, and the progress towards this aim. The first plan, published in February 2016, outlines how Flood Re intends to support the government, the industry and the public to help the market return to risk-reflective pricing in a way that maintains the affordability brought about by the introduction of the scheme.[iii] Flood Re aims to phase out the annual insurer levy of £180m by gradual reduction, while attempting to maintain premium threshold levels, through the following combination of factors:

- **Reduction in risk of flooding**
- **Reduction in cost of flooding**
- **Increased competition in the insurance market**

Flood Re will look to support stakeholders in working towards these aims, whether this involves using its extensive body of data to help direct and prioritise flood defence spending, engaging consumers to increase competition in the market, or incentivising insurers and homeowners to increase flood resilience of individual homes.

During the course of the 25 years, Flood Re will regularly review the impact of the scheme on affordability and availability, and analyse whether a truly affordable risk-reflective market is possible. This will make use of actuarial analysis and modelling, taking into account the exposure of the policies passed to Flood Re, and the impact of climate change.

The IFoA can support Flood Re in its efforts to engage the insurance industry and collaborate to gain a better understanding of the risks faced by the market. However, it remains to be seen whether these steps will be effective in achieving the target result. Whilst Flood Re will provide the aforementioned breathing space for government to work towards a risk-reflective market, and has set in place plans to encourage this, it alone cannot ensure these plans are successful.

The long-term view

Since its launch in April 2016, the Flood Re scheme has undoubtedly improved outcomes for customers previously experiencing high or unaffordable premiums, and provided an important safety net for the next 25 years. However its success will rest on the ability of national and local government, planners and homeowners to control flood risk in a more practical and sustainable way, and how effectively the inevitable weather changes associated with climate change are managed. Changes on an individual household level will be required, with a role for insurers in undertaking repairs in a resilient manner. More comprehensive investment will be needed on a national level to offset the effects of climate change, particularly if we continue to see increased urbanisation and both urban and agricultural planning that does not treat flood risk as a primary concern.

It is important to recognise that whilst Flood Re will help to reduce the financial impact of flooding for customers, it does not change the nature of flood risk or reduce the cost of flooding. It is also important that the consequences of inaction at a national, local or household level are understood.

In the aftermath of the 2015/16 winter floods we have seen the government take steps which suggest they are committed to tackling flood issues. The government has committed to spending £2.3bn on building and maintaining flood defences[iv] over the course of this parliament. In his March 2016 Budget statement, former Chancellor George Osborne announced that the additional income from October's increase in Insurance Premium Tax, a move which could raise £200m for the Treasury, will be used to pay for extra investment in flood defences. However, this tax rise will place an additional burden on insurers and ultimately, if they choose to pass the tax rise on, to customers. This, taken alongside the impact of the Flood Re levy on all customers' home insurance premiums, is a potentially counterproductive step, as an increase in premiums could risk discouraging the benefits of insurance.

As with some previous policy announcements on flood defence spending, this latest measure has been a reactive step to help address the problems arising from a specific flooding event. As highlighted in the Environmental Audit Committee's report in May 2016, these reactive steps do not reflect a long-term, strategic approach to tackling flood risk, either in terms of investment or planning.[v]

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Conclusion

Increased spending on flood defences is necessary, but is only one part of what is required to ensure homes and businesses are sufficiently equipped to cope with future flooding. There is a need for more joined up thinking between government, environmental organisations, planners, homeowners and the insurance industry to help to manage the risks associated with flooding, if Flood Re's transition plan is to be a success.

A comprehensive, joined up plan should look at the various causes of flooding, the importance of planning and of land management, particularly in agriculture. Policies, for example, that are focused on both surface water and riverine flooding could provide an effective policy solution and be successful in reducing risk to properties.

In order to tackle the root of the affordability problem, investment could also usefully be targeted at properties to align the idea of risk-reflective pricing with affordable prices for customers. Flood Re's funding structure may mean that there will continue to be a cross-subsidy between lower and higher risk properties, currently loosely approximated using a home's council tax band (where higher bands pay more towards the Flood Re levy) which is not an accurate indicator of risk. Decisions about where to invest in improvements in flood resilience measures should consider the compatibility of risk-reflective prices and affordability and how any investment can help achieve this goal.

Planning guidelines are also a crucial factor in helping to protect owners of new housing from flooding and understanding the risks they may face. Government and local authorities will need to ensure adherence to planning guidelines to avoid new developments in areas of high flooding risk, despite the competing need to meet demand for housing.

A workable, proactive, long-term strategy for dealing with flood risk needs to be executed in time for Flood Re's transition plan to be a success for industry and customers. This means dealing with the root causes of flooding, and implementing a strategy that recognises the changing nature of flood events and the potential further impact of more frequent and extreme weather events. Achieving an affordable market based on risk-reflective pricing by 2039 is only likely to succeed if the risks themselves change. Where the risk remains high, this will be reflected in household insurance premiums and action at all levels will be essential if customers are to benefit from an affordable insurance market over the next 25 years.

A workable, proactive, long-term strategy for dealing with flood risk needs to be executed in time for Flood Re's transition plan to be a success for industry and customers.

[i] https://documents.theccc.org.uk/wp-content/uploads/2016/01/ccc_infographic_floodrisk_final_hi-res.png

[ii] https://www.abi.org.uk/~/media/Images/Subjects/Flooding/201516%20flooding%20infographic.jpg

[iii] http://www.floodre.co.uk/wp-content/uploads/Flood-Re-Transition-Plan-Feb-2016-FINAL..pdf

[iv] https://www.gov.uk/government/publications/changes-to-insurance-premium-tax-increase-to-standard-rate/changes-to-insurance-premium-tax-increase-to-standard-rate#policy-objective

[v] http://www.publications.parliament.uk/pa/cm201617/cmselect/cmenvaud/183/183.pdf

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