Flood Re
Pricing Home Insurance in a Flood Re environment

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Flood Re

What is the proposal?

Tom Woolgrove
Interim CEO, Flood Re
Flood Risk: What’s the Problem?

• Claims: very expensive
• Events: more frequent, more severe
• UK Housing stock: becoming more susceptible
• Growing public concern > Political issue
• Knock-on Impact: Insurance > Mortgages > Housing Market > Wider Economy
• Competition: growing, more efficient (e.g. aggregators)
• GI Risk Pricing: more sophisticated

Outcome: Premiums for high risk UK homes becoming unaffordable
Flooding in recent years

2007 floods
• Total insurance claims cost: estimated at £3bn
  Total number of claims: around 185,000
• Total domestic claims: around 130,000 (50,000 major)
• 17,000 insured households went into alternative accommodation
• Total commercial claims: around 35,000
• Total motor claims: around 20,000

2009 Cumbrian floods
• Total insurance claims costs of around £200m

2012 floods
• Total insurance claims costs of £594m

2013/14 Winter floods / storms
• Highly politicised
• 17,500 flood claims – c. £450m cost

Climate change science suggests more volatile weather.
UK is a unique market

There are no international market models to clone

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Government backed Reinsurance pool, funded by flat rate levy on Home and Motor – provides XL cover for natural disasters</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Flood peril excluded from property due to high risk. Government Act provides that State compensation MAY be available</td>
</tr>
<tr>
<td>USA</td>
<td>Expensive standalone Private cover available; State NFIP provides subsidised protection: £17bn debt after Katrina</td>
</tr>
<tr>
<td>Germany</td>
<td>Private sector Home add-on available. Officially State does not compensate; in reality it HAS – leading to low take up of Private cover</td>
</tr>
<tr>
<td>Australia</td>
<td>Flood cover optional under Home – risk pricing is rapidly developing. Appears to be on a similar journey that is following the UK</td>
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</tbody>
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Flood Re: Overview

Customers / insurers

- High flood risk homes (200k-500k homes)
- Low flood risk homes

Flood Re Limited
CEO
CFO

Flood premiums
Flood claims

Scheme Administrator

Industry levy (£180m)

“Levy I” Industry Levy (tax)

Pot ‘topped up’ by levy funds

Managing volatility / dealing with major floods

- Volatility largely managed through commercial reinsurance
- Fund shortages below lower level of reinsurance cover: “Levy II” capital call

Low flood risk homes

Industry levy

High flood risk homes

Flood premiums
Flood claims
Status – still to be confirmed!

Flood Re as an industry-owned body, with a public function…

Industry owned
- Industry has control over the key operational decisions, such as underwriting, pricing, claims and investment issues
- Key roles: CEO, CFO, Actuary and Ops Director
- Flood Re Chairman and Board

Public function
- The Flood Re levy will be classified as a tax
- Flood Re must operate according to ‘Managing Public Money’, and work in accordance with both public and private sector accounting standards
- Other financial controls to limit its impact on the public finances in any given year
- The Flood Re CEO will be directly accountable to Parliament

Ideally … not a DEFRA Quango
Underwriting scope

In scope properties will be:

- Used for residential purposes, with a Council Tax banding (not Commercial / SME)
- Insured in the name of an individual or in a trust for an individual
- Occupied by the policyholder or immediate family
- UK only (Isle of Man and the Channel Islands are out of scope)

Only properties meeting the following criteria can be ceded:

- Built prior to 2009.
- Council Tax bands A – G. Band H (England & Wales) and Band I (Wales only) are [currently] out of scope
- 3 or less flats in standalone property; Contents only in larger blocks

Scope needs to be (re)confirmed through Secondary legislation.
Critical path – lots to do

- Procurement:
  - Managing Agent
  - Reinsurance Broker (and then Reinsurance programme)
- Authorisation
- Capital modelling, and IMAP/Solvency II
- Establishing Flood Re as legal entity
- Governance and risk management
- Secondary Legislation / State Aid approval
- Council Tax database
- Insurer readiness

Target go live of 1 July 2015.
Free Market Flood Pricing

• Attritional Cost: Frequency x Severity
• Event Cost: Return Periods
• 3rd Party Models
• Cost of Capital
• Cost of Reinsurance
• GLM by rate factor
• Location is key factor

Outcome: Highly differentiated rates
Flood Pricing under Flood Re

- Ceding Premiums are defined by MOU
- Vary by Council Tax Band
- Data being provided by Government
- This is the rate to charge the customer
- Other perils, margin etc unaffected
- Need to allow implicitly for cost of Levy

Implicit rate cross-subsidy: the key objective of Flood Re is affordability
Implications to Consider

- Which cases to cede?
- When is true rate higher than ceding premium?
- Still a “game” that values knowledge
- Ensure final price is affordable
- Declining to offer cover: unacceptable?
- Interaction with private RI programme?
- Impact on Capital?
- Impact on Claims Operation?
- Response to customer enquiries?

This all needs to be in place on our IT systems in 12 months’ time
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 presenters.
Appendix: Flood premium and excess

- Polices ceded to Flood Re will attract the following premiums based on the property tax band:

<table>
<thead>
<tr>
<th>Council Tax band</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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<tbody>
<tr>
<td>Buildings only</td>
<td>£132</td>
<td>£132</td>
<td>£148</td>
<td>£168</td>
<td>£199</td>
<td>£260</td>
<td>£334</td>
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<tr>
<td>Contents only</td>
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<td>£78</td>
<td>£98</td>
<td>£108</td>
<td>£131</td>
<td>£148</td>
<td>£206</td>
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<tr>
<td>Combined</td>
<td>£210</td>
<td>£210</td>
<td>£246</td>
<td>£276</td>
<td>£330</td>
<td>£408</td>
<td>£540</td>
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- Premiums will be updated annually based on the consumer price index (CPI)
- Premiums will be reviewed every 5 years
- Standard £250 reinsurance excess on Flood Re claims