

POLICY #2: THE ROLE OF RISK COMMUNICATION IN PROMOTING DEMAND FOR FLOOD INSURANCE



Theoretical and empirical research over the past fifty years has revealed that decision makers exhibit biases that characterize intuitive thinking. This type of thinking is guided by emotional reactions and personal experience that lead to biases in making choices. A behavioral risk audit may provide ways to communicate risk so that homeowners will pay attention to these biases.

Nature of Biases

Some biases impact whether individuals decide to protect themselves in advance of a disaster by not purchasing flood insurance or investing in cost-effective mitigation measures.

Table 1. Five Biases Impacting Risk Communication¹

Systematic Bias	Definition
Myopia	The tendency to focus on overly short time horizons so that the costs of protective measures outweigh their long-term future benefits
Amnesia	The tendency to forget about the impact of a losses from future hazards if one hasn't experienced damage in the past few years
Optimism	The tendency to underestimate the likelihood that losses will occur from future hazards
Inertia	The tendency to ignore uncertainty by maintaining the status quo rather than examining options for protecting oneself before the next disaster
Simplification	A tendency to focus on one element of the risk (e.g. likelihood or consequences) when there is uncertainty associated with all the elements

Myopia People's perspective on the future typically includes a planning horizon shorter than the long-run value of investing in cost-effective mitigation measures for reducing flood losses

Amnesia Many homeowners cancel their flood insurance policies if they have not had a claim for a few years

Optimism People tend to believe that they are immune from threats such as flooding because it has a low probability of occurring next year.

Inertia Homeowners often remain unprotected against natural disasters because there is considerable uncertainty as to whether a change will result in a gain or a loss.

Simplification. Individuals are likely to make choices in advance of a disaster by focusing on the low probability of a flood and view its likelihood of occurrence as below their threshold level of concern

¹ Source: Meyer and Kunreuther *The Ostrich Paradox: Why We Underprepare for Disasters* (2017)

Role of a Behavioral Risk Audit

Recognizing that it is difficult to change these biases, a behavioral risk audit provides ways for residents in the flood plain and other stakeholders, such as floodplain managers, local officials, lenders, developers, and real estate agents, to address the above systematic biases. The behavioral risk audit starts by characterizing how individuals are likely to perceive risks and why they might not focus on the probability and consequences of the risk in the same way that experts do. Strategies are proposed that work *with* rather than *against* people's perceptions and natural decision biases by communicating options coupled with short-term economic incentives, leading individuals to pay attention to the risk, as illustrated by the following examples:

Addressing Myopia: Provide a long-term loan to cover the up-front cost of the mitigation measure. If the resident has purchased flood insurance and their premiums reflect the risk, then the yearly premium reduction from investing in loss prevention may at times be greater than the annual cost of the loan.

Addressing Amnesia: Convince people that *the best return on their policy is no return at all* by giving people a reward at the end of a claim-free year in the form of a restaurant chit so they can celebrate having had no return on their policy. Insurance renewal bills should also come packaged with vivid literature that reminds people *why* they should buy flood coverage (e.g. highlight the flood-proneness of the area in which they reside).

Addressing Optimism: Stretch the time horizon when presenting information on the likelihood of a flood occurring. For example, indicate that there is a greater than 1 in 4 chance of suffering damage from at least one flood over the next 30 years rather than specifying there is a 1 in 100 annual chance of flood damage. As demonstrated by recent experimental research, property owners may pay attention to its consequences rather than treating the flood as below their threshold level of concern.

Addressing Inertia: Add flood coverage as an option to the standard homeowners policy in all areas of the flood plain. Residents will then be aware of the cost of protecting themselves against the hazards they face and will be more likely to want this coverage than if they had to do the extra work of buying a separate flood insurance policy. This proposal will be discussed in the small group on *Including flood in homeowners policies*.

Addressing Simplification: Develop damage scenarios for a resident's property should a flood occur so as to divert attention from the low probability of its occurrence.

Discussion Questions:

- How much impact would changes in our risk communication strategy have on the take up of private flood insurance?
- What are the major challenges to implementing a behavioral risk audit and how could these challenges be addressed?
- What are the next steps towards implementation of a risk communication strategy coupled with economic incentives that encourages homeowners to think about purchasing flood insurance?