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Does Compulsory Insurance for Natural Disasters Help?

The dramatic flood damage in the German states of Rhineland-Palatinate, North Rhine-Westphalia, and to some extent also in Bavaria and Saxony has revived the debate about compulsory insurance for damage from natural disasters. Currently, there is no obligation for homeowners in Germany to insure themselves against flood damage. About 46 percent of all buildings are insured voluntarily, but there are large differences within Germany. In Baden-Württemberg, 94 percent have insurance, while the figure in the particularly hard-hit Rhineland-Palatinate is currently 37 percent, and in Bremen, only 23 percent.

There are no official statistics on how many houses are insured in areas that are particularly at risk of flooding. Compulsory insurance seems to make economic sense, provided it is designed appropriately. Then it can help to reduce the overall economic damage caused by flooding in the long term. Insurance creates an incentive to build new buildings in areas that are less at risk. However, if the fundamentally good idea of compulsory insurance is diluted in the political process – and the current debate already indicates this – such insurance would do more harm than good.

The Samaritan's Dilemma of the State

The most important argument in favor of compulsory insurance is the state's Samaritan's dilemma. If natural disasters occur, as in the current flooding, and the affected buildings are not insured, the state has little choice but to extend a helping hand. Support from the community in times of need is commendable; refusing it would meet with incomprehension. However, this support has repercussions for people's willingness to take out insurance in the first place. When weighing up expensive natural disaster insurance against the risk of suffering damage without insurance, the decision is often made against insurance, and the greater the state assistance that can be expected if things do go wrong, the more likely this is to be the case.

More importantly, if damage is compensated for without charging insurance premiums that are commensurate with the risks, there is no incentive to avoid particularly vulnerable areas. As a result, too many buildings tend to be constructed in vulnerable locations. The costs of this excessive risk assumption are then borne – at least in part – by the general public via state aid.

Control Effect of a Risk-Adjusted Insurance Premium

By contrast, with insurance premiums that adequately reflect local risks, property owners in vulnerable locations would have to pay more than those in relatively safe ones.

As a result, more new buildings would be built in less threatened areas. Owners of real estate in flood locations would also be more committed to ensuring that government agencies improve flood protection; for example, through adding more floodplains or reversing river-straightening efforts. Resilience to natural disasters would increase with compulsory insurance designed in this way.

Occasionally, some argue against a comprehensive insurance obligation by pointing out that a corresponding insurance offer does not even exist. However, this overlooks the fact that the insurance offer is being pushed back precisely because of government aid. Since insurance premiums would be high in at-risk areas and hardly anyone would take out insurance when they can rely on state aid, it is not worthwhile for the insurance companies to develop this product at all. However, a comprehensive insurance obligation would create a large market in Germany that private insurance companies could tap into. Given Germany's relatively small size on a global scale, there would also be no reason to fear that these risks could not be diversified in the global reinsurance market. Compulsory insurance has already been discussed once, after the Elbe floods in 2002. At the time, the German insurance industry confirmed that international reinsurers could cover at least a significant portion of the risks. However, compulsory insurance was not introduced.

Compulsory Insurance Only for New Real Estate

Another potential objection to compulsory insurance is that it would place an unreasonable burden on owners of existing houses, which they may have recently purchased at high prices. Their properties could lose even more value than is already the case due to the growing flood risks. To take this group into account, policymakers could limit compulsory insurance to newly built homes. This would at least ensure that sites with flood risks are avoided in new construction.

To summarize: compulsory insurance can make economic sense to free the state from the Samaritan's dilemma and increase resilience to natural disasters. To achieve this, however, insurance must be properly designed. What is needed is compulsory insurance with a wide range of premiums, the amount of which depends on location. Insurance premiums for individual buildings must be based on the individual flood risk. It should also include a deductible to maintain incentives to choose structural designs that minimize flood damage. However, insurance coverage must also not be so low that those affected are nevertheless granted extensive government assistance.

On the other hand, compulsory insurance can become an economic boomerang if essential components of such an insurance solution, especially risk-based premiums, are diluted in the political process. The debates on compulsory insurance in the past have shown that politicians often favor uniform premiums.

However, if compulsory insurance were coupled with uniform premiums, the outcome would be even worse than without insurance. Those affected would receive compensation in the event of a claim. But this compensation would come from the other compulsorily insured persons instead of from the state – which is ultimately backed by all taxpayers or insured persons.

Greater Resilience against Extreme Weather Damage

This would further reduce the incentives to avoid particularly vulnerable areas. Because of the single premium, it makes no difference to individuals whether they construct their building in a relatively safe location or a vulnerable one. Moreover, such comprehensive insurance would likely cover a larger share of losses than current government assistance, further weakening incentives to build in safe areas. Such a misguided insurance solution would weaken, not strengthen, resilience in Germany to the consequences of extreme weather events. Thus, properly designed compulsory insurance can help; improperly designed insurance can be worse than none at all.

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