

SPOTLIGHT 2

The governance challenges of managing risks

Tackling environmental and sustainability challenges depends on the availability of commitment mechanisms to address natural hazards and to protect the environment and resources for future generations, who are not represented in the policy arena. When it comes to natural resources—and their links to risk management—cooperation is also challenging because opportunistic overexploitation of resources is the norm in many societies.

What is an acceptable level of risk?

Many natural risks are systemic—and therefore collective—by nature, and governments play a key role in the management of such risks (World Bank 2014). For example, individuals cannot protect themselves against floods independently, and thus they must rely on what is put in place at the collective level. This is particularly true in high-density population areas with geographically centered (agglomerated) infrastructure. Despite regular claims that “disasters are unacceptable,” removing all risks would be prohibitively costly to governments. Thus a certain amount of risk must be accepted. Decisions on the acceptable level of risk that individuals must bear should be made through a collective political process. What risks are mitigated through markets and what risks—and whose risks—are dealt with through public action are therefore governance-related decisions.

In *The Great Risk Shift*, Jacob Hacker (2006) describes how a larger share of economic risks were

Stéphane Hallegatte, based on World Bank (2014) and Fay and others (2015).

borne by U.S. households in the 2000s than in the 1970s and 1980s, increasing their vulnerability to shocks such as illness, unemployment, and retirement. In western European countries, by contrast, there is a tendency for governments to bear some of the risks and protect households from shocks, which also has implications for the fiscal sustainability of that social contract, particularly because of the current demographic trends (World Bank 2014).

Defining an acceptable level of risk is difficult because of the complexity of the process for determining its distribution and because of the wide differences in preferences, values, and beliefs. Some individuals are more risk averse than others and may prefer a more cautionary approach. Defining a social level of acceptable risk is also difficult because of differences in sensitivity—for example, people have very different sensitivity to local air pollution. In the presence of such heterogeneity, designing homogeneous regulations is challenging and highly dependent on considerations of equity (especially when sensitivity is correlated with other social factors). The selected regulation is also unlikely to satisfy all individuals and may require compensatory action, which requires a process to decide who deserves compensation and to ensure that compensation is proportional to the losses and does not create long-term irreversible costs.

How can risk be allocated across households and over time?

When risks are borne by households, existing inequities can be manifested and reinforced. For example,

when a big snowstorm in the Washington, D.C., area leaves many roads blocked and public transportation disrupted for two weeks, the option of removing the snow in order to get to work is open only to those who can afford to pay for it. Less well-off people are left not only unable to leave their homes, but also unable to generate income because of the lack of mobility, deepening the effects of the shock on their welfare.

Risk is distributed not only across households but also over time. Even more complicated are cases in which the benefits of risk management extend over the very long term. For example, for climate change the beneficiaries are not even born yet to protect their interests. Dispersed—or unrepresented—interests are a classic issue leading to government failures.

How can political will for risk management be generated in the face of dispersed benefits?

Even when they agree on an acceptable level and allocation of risk, politicians may be reluctant to devote financial and political capital to risk management efforts because the costs tend to be immediate, concentrated, and observable, whereas the benefits are longer term, distributed more broadly, and often less visible. For example, when prohibiting development in flood zones, decision makers impose a cost on landowners who will naturally tend to oppose this new regulatory constraint. On the other hand, the people protected by the regulation—for example, future buyers of apartments in the newly developed flood-prone areas—are often not aware that the regulation may eventually protect them and therefore rarely take action to support it.

To garner political support, policy packages need to be socially acceptable and thus consistent with a country's social objectives, such as protecting the poor. What does this mean in practice for designing policies that are more likely to succeed? Consider countries seeking to adopt climate change policies. Although the poor are expected to benefit in the long run from mitigation policies because they are the most vulnerable to climate change, these types of policies are not necessarily pro-poor in the short run. It is therefore critical to use the savings or new proceeds generated by climate policies to compensate poor people, promote poverty reduction, and boost safety nets. One way to do that is by recycling revenue from carbon pricing instruments through tax cuts and by increasing transfers to the population. A modeling

exercise carried out using data from developing countries shows that subtracting \$100 from fossil fuel subsidies and redistributing the money equally throughout the population would on average transfer \$13 to the bottom quintile of the income distribution and take away \$23 from the top quintile. Redistribution has been shown to significantly increase the odds that reforms will succeed. A review of reforms in the Middle East and North Africa classifies all reforms with cash and in-kind transfers as successful, as opposed to only 17 percent of those without (Sdravovich and others 2014).

Another factor in the success of reforms is the alignment of incentives in the policy arena in such a way that the commitment to a long-term objective can be credible. Returning to the example of climate change policies, consider the role of carbon pricing. Carbon prices are critical for the efficiency of the transition toward the zero carbon emission economy that is required to stabilize climate change. However, a carbon price alone is unlikely to provide enough incentive to invest in new, radically different technologies or to change long-term investment because the long-term price signal is hardly predictable and credible. Given the expected lifetime of power plants, a credible carbon price pathway would have to be announced at least three decades in advance to spur the optimal amount of investment in low-carbon power plants. But doing so is difficult because governments have a very limited ability to commit over such long periods (Helm, Hepburn, and Mash 2003; Brunner, Flachsland, and Marschinski 2012). Thus to reduce emissions through investments with long-term consequences (such as infrastructure, research and development, and long-lived capital), additional regulations, norms, or direct investments are needed. Policy makers could, for example, kick-start the transition either by temporarily supporting investments in low-carbon technologies (Acemoglu and others 2012) or by imposing additional regulations or performance standards (Rozenberg, Vogt-Schilb, and Hallegatte 2014).

The lack of well-accepted indicators for risk makes it difficult to measure the performance of decision makers and to make them accountable for their choices in terms of risk management. However, evidence from environmental issues such as asbestos, lead paint, and tobacco use reveals that increasing transparency and providing a voice to dispersed interests help avoid capture by interest groups and improve policy decisions. Contributing factors, such as when civil society organizations are able to develop independent expertise and freely communicate their conclusions through the media, internet, and social

networks, as well as when there is free access to data and some legal protection for whistle-blowers, can help to strengthen the effectiveness of risk management policies.

References

- Acemoglu, D., P. Aghion, L. Bursztyn, and D. Hemous. 2012. "The Environment and Directed Technical Change." *American Economic Review* 102 (1): 131–66.
- Brunner, S., C. Flachsland, and M. Marschinski. 2012. "Credible Commitment in Carbon Policy." *Climate Policy* 12 (2): 255–71.
- Fay, Marianne, Stéphane Hallegatte, Adrien Vogt-Schilb, Julie Rozenberg, Ulf Narloch, and Tom Kerr. 2015. *Decarbonizing Development: Three Steps to a Zero-Carbon Future*. Climate Change and Development Series. Washington, DC: World Bank.
- Hacker, Jacob. 2006. *The Great Risk Shift*. New York: Oxford University Press.
- Helm, D., C. Hepburn, and R. Mash. 2003. "Credible Carbon Policy." *Oxford Review of Economic Policy* 19: 438–50.
- Rozenberg, Julie, Adrien Vogt-Schilb, and Stéphane Hallegatte. 2014. "Transition to Clean Capital, Irreversible Investment, and Stranded Assets." Policy Research Working Paper 6859, World Bank, Washington, DC.
- Sdravovich, Carlo, Randa Sab, Younes Zouhar, and Giorgia Albertin. 2014. *Subsidy Reform in the Middle East and North Africa: Recent Progress and Challenges Ahead*. Washington, DC: International Monetary Fund.
- World Bank. 2014. *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank.