

## **Forum for Financial Stability at the Deutsche Bundesbank**

Frankfurt, 26 July 2017

### **“Assessing and Communication of Risks in Complex Systems”**

#### **Note for Participants**

##### **Background**

According to the Financial Stability Act, which came into effect in January 2013, the Bundesbank's task is to contribute to maintaining financial stability. In order to fulfil this mandate, the Bundesbank analyses risks to financial stability and identifies and proposes appropriate policy measures. This is why the exchange of ideas with researchers and market participants is important. In 2016, the Bundesbank set up the Forum for Financial Stability at the Deutsche Bundesbank in order to create a more formal setting for such an exchange of ideas. The forum's meeting is held under Chatham House rules.

The topic of the upcoming Forum for Financial Stability is “Assessing and Communication of Risks in Complex Systems”.

There are several fields in which it is necessary to analyse and communicate risks arising in complex systems. This involves particular challenges. Due to the nature of complex systems, any assessment of these risks necessarily involves a certain degree of uncertainty. Estimates of probabilities for negative events and their impact are, in and of themselves, uncertain. Additionally, relevant events might be overlooked. More research will not necessarily reduce this uncertainty, and decisions often need to be made before conclusive evidence is available.

This creates challenges at various stages of the assessment and policy cycle, ranging from the initial detection of a potential danger to formulating and implementing a certain “policy” response. Communication is arguably the first instrument used when responding to detected risks and dangers. Hence, it is the instrument which will be applied under the highest degree of uncertainty. Meanwhile, the potential impact of misleading signals can be huge. The specific challenge for communication is therefore twofold. Not only is the information that has to be communicated potentially complex, it is also uncertain in and of itself. This information is thus often considered difficult to understand or even perceived to be misleading. Second, the interest of target audiences frequently seems limited or variable depending on the issues at hand and the point in time these issues are raised.

Various agencies have to communicate risks arising in complex systems. These involve, for example, the communication of technical, environmental, IT, or political risks. Macroprudential policy faces similar challenges. Financial stability is a multidimensional concept applied to the complex system of financial markets. Therefore, policymakers need a target audience-oriented approach of communicating risks and uncertainties as well as an approach to scale down complexities to achieve their overall aim.

## **Objectives**

The objective of the forum is to discuss from an interdisciplinary angle the challenges in communicating risks and uncertainties in a complex environment. Similarities and differences between the fields will be elaborated by experts on communicating various types of risks (technology risks, IT risks, hazard and health risks as well as risks in general) from academia, public institutions and industry. The Forum tackles questions such as:

- How do participants and their represented institutions communicate on risks and uncertainties?
- Which methods are and can be used to structure the communication of those issues?
- Are there limits of communication?
- Where are similarities and differences between participants' approaches and challenges to communication?

## **Logistics**

The forum will take place on Wednesday, 26 July 2017, in the Bundesbank's Central Office in Frankfurt am Main. The event will begin at 10.00 CET and end at 13.00 CET. The forum will be chaired by Professor Claudia Buch (Vice-President, Deutsche Bundesbank). After the workshop, there will be lunch for participants.

## **Agenda**

### **10:00-10:15 Introduction**

Opening remarks by Professor Claudia Buch (Vice-President, Deutsche Bundesbank)

### **10:15-11:30 Session 1: How to Communicate the Unknown?**

Objective: The session contributes to clarifying the challenges in and methods of communicating risks and uncertainties.

Introductory statement by Professor Friedrich Hesse (15 min.)

Issues for discussion:

1. How is the unknown communicated?
2. Which methods, styles and concepts exist to communicate risks?
3. Which methods do we have to evaluate different concepts and methods?

### **11:30-11:45 Coffee Break**

### **11:45-13:00 Session 2: Experience with Communicating Risks and Uncertainties**

Objective: Participants exchange views on their experiences with the communication of risks and uncertainties in complex systems. Which “approaches” have been used and what results were obtained?

Introductory statements by Professor Gaby-Fleur Böhl and Cecilia Skingsley (10 min. each)

Issues for discussion:

1. Which methods and concepts have been applied, if any?
2. Which lessons have been learned?
3. How to translate these results to communicating macroprudential policy?

### **13:00-14:00 Lunch**

## **Participants**

1. **Professor Claudia Buch, Vice-President, Deutsche Bundesbank**
2. **Professor Gaby-Fleur Böhl, Head of Department Risk Communication, Federal Institute for Risk Assessment**
3. **Professor Jon Danielsson, Director of the Systemic Risk Centre, London School of Economics**
4. **Matthias Gärtner, Press Spokesman, Head of Communication Strategy and Press, Federal Office for Information Security**
5. **Susanne Glasmacher, Head of Press and Public Relations, Robert Koch Institute**
6. **Professor Friedrich Hesse, Chair for Applied Cognitive Psychology and Media Psychology, University of Tübingen**
7. **Cecilia Skingsley, Deputy Governor, Sveriges Riksbank**

## **Selected Bibliography**

- Binmore, K. (2009), *Rational Decisions*, Princeton, NJ: Princeton University Press.
- Blinder, A., Ehrmann, M., Fratzscher, M., De Haan, J., Jansen, D.-J. (2008), Central Bank Communication and Monetary Policy: A Survey of Theory and Evidence, *Journal of Economic Literature*, vol. 46(4), pp 910-45.
- Born, B., Ehrmann, M., Fratzscher, M. (2011), How Should Central Banks Deal with a Financial Stability Objective? The Evolving Role of Communication as a Policy Instrument, in S. Eijffinger and D. Masciandaro, eds., *Handbook of Central Banking, Financial Regulation and Supervision after the Financial Crisis*, pp 245–68, Cheltenham: Edward Elgar.
- Cornand, C., Heinemann, F. (2008), Optimal Degree of Public Information Dissemination. *The Economic Journal*, vol. 118(528), pp 718–742.
- Cukierman, A. (2009), The Limits of Transparency, *Economic Notes*, vol. 38(1–2), pp 1–37.
- Dale, S., Orphanides, A., Österholm, P. (2011), Imperfect Central Bank Communication: Information versus Distraction, *International Journal of Central Banking*, vol. 7(2), pp 3-39.
- Goldberg, E., Podell K. (1996), Adaptive versus Veridical Decision Making and the Frontal Lobes. *Consciousness and Cognition*, vol. 8(3), pp 364-377.
- Knight, F. H. (1921), *Risk, Uncertainty, and Profit*. New York: Houghton Mifflin.
- Marewski, J. N., Gaissmaier, W., Gigerenzer, G. (2010), Good Judgments Do Not Require Complex Cognition, *Cognitive Processing*, vol. 11(2), pp 103-121.
- Mishkin, F. (2004), Can Central Bank Transparency Go Too Far?, in C. Kentand S. Guttman, eds., *The Future of Inflation Targeting*. Sydney: Reserve Bank of Australia, pp 48–65.
- Morris, S., Shin, H. (2002). Social Value of Public Information, *American Economic Review*, vol. 92(5), pp 1521–34.
- Savage, L. J. (1954), *Foundations of Statistics*, New York: Wiley.
- Slovic, P. (1987), Perception of Risk, *Science*, vol. 236(4799), pp 280-285.
- Svensson, L. (2006), Social Value of Public Information: Morris and Shin (2002) Is Actually Pro Transparency, Not Con, *American Economic Review*, vol. 96(1), pp 448–51.
- Volz, K. G., Gigerenzer, G. (2012), Cognitive Processes in Decisions Under Risk are not the Same as in Decisions Under Uncertainty, *Frontiers in Neuroscience*, vol. 6(105), pp 1-6.
- Woodford, M. (2005), Central Bank Communication and Policy Effectiveness, *Proceedings - Economic Policy Symposium - Jackson Hole*, Federal Reserve Bank of Kansas City, Issue August, pp 399-474.