
Preface

As I write, the financial systems of the world are collapsing with still no clear indication of what the consequences will be and which measures should be taken to avoid such a crisis in the future. There seems to be agreement though, that the financial instruments introduced in the past few decades entailed far too much complexity and uncertainty and that there was too little regulatory control over the use of these instruments.

Management of uncertainty with the aim of achieving self-control is the core concern of this book. It was not written with a focus on financial systems, but many concepts developed in this book are applicable to this field as well. The generic principles of reducing, maintaining or increasing uncertainties in view of the different contingencies an organization is faced with, the fundamental issue of how much control is possible and who should be in control, and the question of how much and what kind of regulation is necessary with the overall aim of finding an appropriate balance between system stability and flexibility are at the centre of heated debates on the future of finance.

The financial crisis is also a very drastic example of the multi-layered nature of the problems discussed in this book. The management of uncertainty concerns all of us as individuals, be it as operational or strategic decision-makers in organizations, as private persons managing our lives, or as citizens involved in the governance of risk on a societal level. The management of uncertainty is also one of the main tasks of public and private organizations on a strategic level as well as in day-to-day operations. In the case of the financial system, it seems that for quite some time problems were located mainly on the individual level. The losses produced by Nick Leeson for Barings Bank or by Jérôme Kerviel for the Société Générale were attributed to personal greed and incompetence. The organizational and societal dimension was only gradually discovered as it became clear that even the most competent and conscientious individuals were not able to handle the uncertainties involved in investment banking adequately. Rich people becoming ever richer through sophisticated exploitation of the uncertainties deliberately built into new financial instruments were celebrated as a victory of capitalism. The forces of the free financial markets were to be left unabated by state regulation in order to maximize this exploitation. As state intervention sets in, we all get to pay for the

riches of those chosen few. More regulation and maybe even a tamed form of capitalism seem to be regarded as necessary next steps in the attempt to find a new and better balance between financial stability and flexibility. In a small way, this book tries to help people who have to make decisions on managing uncertainties in order to balance stability and flexibility, be it in finance or any other realm of the world of work.

In turn, many people have helped me tremendously to write this book. The initiative came from Springer when Anthony Doyle asked me whether I might be interested in expanding the ideas I had expressed on the management of uncertainty in system design in a short article, which appeared in 2004 in *Annual Reviews in Control*. However much I have regretted my positive response to him in those times when the book did not seem to materialize at all, I am very grateful to him for having posed this challenge to me and for having been incredibly patient with its slow progress. My sincere thanks also go to Claire Protherough at Springer UK for her unwavering help in the final stages of editing the book.

The ideas presented in this book had started to take shape long before I ever sat down to write it. Many people have contributed to this process, foremost my collaborators over the years: Cuno Künzler, Steffen Weik, Toni Wäfler, Martina Zölch, Cornelia Ryser, Anna Windischer, Barbara Klampfer, Sven Grund, Sabine Raeder, Sylvia Manchen Spörri, Scott Little, Lille Springall, Alexandra Totter, Enikő Zala-Mező, Hannes Günter, Anette Wittekind, Barbara Künzle, Marius Gerber, Daniel Boos, Michaela Kolbe, Johann Weichbrodt, and Cécile Tschopp. Chapters 4 to 8 build extensively on work carried out and published together with some of them. Frequent discussions on how to conceptually unite the various endeavours in our research group were an important motivation and inspiration for developing the management of uncertainty framework presented in the first three and final chapters.

I also owe many thanks to colleagues in various parts of the world for helping me to form and sharpen my arguments, including Michael Arthur, Christof Baitsch, Guy Boy, Rob Briner, Chris Clegg, Rhona Flin, David Guest, Tim Hall, Erik Hollnagel, Larry James, Bruno Staffelbach, Johan Stahre, Franziska Tschan, Nick Turner, Eberhard Ulich, John Wilson, Sid Winter and Yan Xiao. And there were five absolutely invaluable colleagues who read through the whole book and praised and criticized with the perfect balance needed for the self-assured self-criticism that spurred on the final revision: Toby Wall, Georg von Krogh, Andrew Hale, Carlo Cacciabue, and Hannes Günter – thank you! For transforming the manuscript into a proper book, my thanks go to Jacqueline Hohermuth and Mareike Haase.

This book could not have been written without the many contacts and collaborations I have had over the years with practitioners from a variety of public and private organizations. Many thanks to all of them for sharing their experiences and for being open to “academic” dialogue. In various parts of the book, examples from the railways are given – which is by no means accidental because I love to travel by train and because I had the opportunity to work with some exceptional people at the Swiss Railways, who were eager to try out new approaches to managing uncertainty. My thanks go to Andreas Hönger and Hans Vogt especially. I also wish to thank Ueli Straub, Stephan Müller and Ernst Zirngast at Swiss Reinsurance Company for the long and very fruitful cooperation on the assessment of safety man-

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Finally, a thousand thanks and more to the three most important men in my life: Liam and Alan for stirring up my life with many new uncertainties, and Tom for being my first and last critic and for being the source of both crucial uncertainties and certainties in my life.

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