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## Editorial

### Sociological analyses of economic organizations, uncertainty, and risk in times of crises: An introduction to the special issue



#### 1. Introduction: economic organizations as drivers and managers of uncertainty and risk in times of crises

The past 15 years represent an era of capitalism in crises. Phenomena like the global financial crisis (2007–2009), followed by the European sovereign debt crisis in 2010, major political occurrences such as the Brexit referendum (2016), or Covid-19 and the energy crisis in Europe lately have challenged economic and political reality that likewise engendered critics towards it. Furthermore, the danger of an ecological collapse is omnipresent. And with respect to the ongoing war in the Near East and Ukraine it is currently impossible to foresee what further crises are looming.

As an inherent characteristic of (post)modern societies (Luhmann, 1993), new uncertainties and risks have emerged that require action. Ulrich (Beck, 1992) already pointed to two levels of the phenomenon. It implied both an actual increase in modernization risks as well as the fact that the risk society itself becomes aware of itself as a risk society: questions of how to deal with self-produced risks become the focus of social debate with corresponding socially transformative effects. This is ultimately described as a reflexive modernization process. While the focus of this temporally and spatially focused diagnosis was on scientific-technical or technical-economically produced risks, it was later expanded by Beck with his thesis of a world risk society. Here, global risks such as ecological-climatic, economic or terrorist risks, the connection between risk and catastrophe, culturally different and conflicting perceptions of risks and, in particular, the uncertainty and non-rationalizability of these risks and their side effects were also identified and discussed (Beck, 2007). The observation of a high uncertainty regarding the future, which occurs simultaneously in the mode of risk (i.e. decision-dependent) as well as it is connected to assumptions about potential crises (catastrophe), continues to be relevant in various social problematizations and forms of dealing with them in the context of risks (e.g., Koffman et al., 2020), but also in the context of security (Petersen, 2011).

Economic organizations as central protagonists of current socio-economic and socio-political dynamics are twofold involved: First, they have to deal with these risks and uncertainties in order to secure own goals and legitimation. The way they cope with them has major impacts on the socio-economic consequences of these crises and on the organizations. Second, economic organizations may be involved in the emergence of crises or even intensify them, if, for example, market-based institutional logics and management processes manifest crises rather than reducing them (Tooze, 2018).

Research analyzing corporate action under conditions of uncertainty

is often conducted in the realm of organizational and economic sociology (e.g., Apelt & Senge, 2015; Gephart et al., 2009; Hardy et al., 2020; Power, 2016; Wenzel & Krämer, 2018). Both research fields observe a diversity to cope with risk and uncertainty concentrating, for example, on inter- and supraorganizational processes, structures, and networks or abstract and general intraorganizational phenomena or decision making in organizations (Beckert, 2016; Schreyögg & Sydow, 2010; Senge, 2020). Scholars in these fields have traditionally focused on economic organizations, broadly understood as organizations primarily targeting monetary profit like insurance companies, manufacturers of medical products or airlines (e.g., Luhmann, 1982). With this Special Issue, we aim to emphasize economic organizations as analytical focus – as drivers and likewise as managers of uncertainty and risk in times of crises. In our observations there are especially three aspects of particular interest regarding the role of these organizations as a typical actor in dealing with multiple uncertainties.

#### 2. Uncertain futures and changing corporate organizations

The first aspect deals with the observation that there are different modes, practices or strategies in how organizations deal with uncertainties regarding future risks. The relationship between organizations and their environment can take, in fact, two different forms: if the environment is supposed to provide resources (e.g., electricity, raw materials), the organization perceives its relationship with the environment as a form of *dependency*. If the environment is perceived as a source of information, the organization faces a problem of *uncertainty* (Alchian, 1950). Uncertainty arises because the organization never has all the information necessary to make a safe decision—even when the information pertains to the supply of essential resources for the organization. On the other hand, in a hypothetical scenario of complete information, there would be no decisions to make. Thus, uncertainty appears both as a problem and as a resource.

To cope with uncertainty, organizations can resort to complex strategies of risk management (e.g. financial instruments as futures and options). These are often *second-order risks* (Holzer & Millo, 2005): the organization makes risky decisions whenever it implements an action plan, and to mitigate these risks, it makes second-order decisions that are not free from risks themselves (e.g., the organization risks paying the price of an option unnecessarily). In other words, even avoiding risks is a risky strategy.

Though we can differentiate degrees of uncertainty, organizations operate in an environment characterized by fundamental uncertainty (Beckert, 2013a; Orléan, 2011). “Fundamental uncertainty” applies to

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situations where there is uncertainty regarding ego's capabilities and, in addition, uncertainty resulting from the non-predetermined actions of alter ego and the reflexivity of the interaction situation (where the actions of alter have a bearing on the action of ego and vice versa) (Beckert & Berghoff, 2013; Dequech, 1999). Fundamental uncertainty, however, does not imply complete ignorance, rather, that knowledge is still present, though there are different knowledges and non-knowledges (Smithson, 2008; Wilkesmann, 2009). In all instances, knowledge needs to be supplemented in order to motivate decisions which are directed into an unknown future (Beckert, 2013a, 2013b; Keynes, 2006, pp. 148, 1937; Dequech, 1999, pp. 416 f.). Thus we criticize the assumptions of standard economic theory, namely that actors can identify all possible future states and that they know probabilities of the occurrence of those future states (Knight, 1985). In this line of thinking uncertainty is transformed into risk which is calculable and the future becomes predictable (Knight, 1985). In our argumentations situations of risk are situations of fundamental uncertainty.

For organizations, it is impossible to operate in a risk-free context. Taking risks means making decisions—which aligns with the self-reproduction of the organization itself (Luhmann, 2000)—and making decisions means regenerating risks that need to be managed. In a hyper-complex and hyper-connected society, these preconditions force organizations to devise new methods of risk management and forms of organizing the future against the background of classical (quantitative) modes of calculation, strategies of rational planning, and bureaucratic control.

For example, there is evidence for the persistence and further elaboration of quantifying methods and classical management techniques in coping with futures in organizations (Jarzabkowski & Kaplan, 2015). Especially in economic contexts “calculative risk practices” are observable (Callon & Muniesa, 2005). As a result, organizational decisions are informed by a huge amount of information. The technologies involved influence the mode of risk construction (Beunza & Stark, 2004). The emergence of calculative practices is captured as a three-step process (Callon & Muniesa, 2005, p. 1231): “detachment” means that a finite number of entities or things are first arranged in a *calculative space*, for example in invoices, excel spreadsheets, screens, trading floors or even in the working memory of computers. This guides the selection regarding what becomes the subject of a calculation and what does not. The association of these entities marks the second step. They are manipulated or transformed, whether by a calculator or by arbitrage traders who have the prices of two payment promises plotted on a screen. The calculation is completed by extracting a result (e.g. a sum, ordered lists or a dichotomous choice). The result is an entity that can leave the calculative space and in turn become the subject of other calculations. In addition to quantitative, arithmetic, econometric or algorithmic calculations, this three-step process also addresses qualitative, cognitive and, in principle, affective forms of calculation, which is also referred to as “qualculation” (Callon & Law, 2005; Cochoy, 2008).

This aspect points to another phenomenon. Classical concepts of organizing the future are challenged in the course of crisis experiences, thus strengthening potential for alternative organizational risk practices, for example: techniques of imagination, simulation, improvisation, trial and error or premediation, where uncertainty is intentionally reproduced (Anderson, 2010; Dell, 2012; De Goede, 2008); digital technologies as data processing and forecasting tools (Cevolini & Esposito, 2020); arrangements that likewise create situational flexibility, structural stabilization, and resilience (Andersson et al., 2019; Bigley & Roberts, 2001; Folkers, 2017; Heinlein & Huchler, 2021; Schreyögg & Sydow, 2010); or emotions and affects as (heroic) valuation practices (Groddeck, 2018; Lange & Scheve, 2020; Raza-Ullah et al., 2020; Senge, 2020).

Against this background, the question arises as to how new uncertainties affect established risk practices. At the same time, it is of interest under which conditions organizational anticipations of uncertain futures and (new) organizational forms of dealing with them are

institutionalized - or rejected (e.g. Cavelty, 2020).

### 3. Inter- and intra-organizational relationality and translations

Some organizations seem to be especially equipped for dealing with uncertainty. This is especially the case for high reliability organizations (Porte & Consolini, 1991). High-Reliability Organizations (HROs), such as aircraft carriers or nuclear plants, have been identified by scholars as role-models for organizations that have to cope with uncertainty in a reliable way (Roberts, 1990; Schulman, 1993a). While most organizations react to uncertainty following an “anticipatory model” (Schulman, 1993b), HROs developed strategies to actively manage uncertainty without relying on strict organizational routines and decision procedures. Although HROs operate complex technological systems whose complexity cannot be fully apprehended by the organizations, HROs are able to run these systems without causing potentially hazardous accidents. HROs are able to do so despite uncertainty because their “culture of mindfulness” allows them to adapt quickly to unforeseen and novel situations (Weick & Sutcliffe, 2007, p. 124). Management scholars argue that other kinds of organizations could enhance their ability to deal with uncertainty by adopting HROs strategies (e.g., Senge & Dombrowski, 2015).

This is also the case for other social domains. Methods and findings from other security organizations like firefighters or the police (Nachbagauer et al., 2020) are consulted for questions of management of economic organizations in complex and uncertain environments, as is the concept of resilience, which is a central paradigm of security policy, but originates in particular from ecology (Kaufmann, 2019; Walker & Cooper, 2011). Another example which does not originate from the field of security, is the recommendation to draw on theories, concepts and models from political science and, above all, international relations, for commercial risk management, particularly with regard to the analysis of political risks (Fägersten, 2015).

Phenomena such as these raise the question which multiple and incomplementary environments economic organizations observe in order to adapt (new) organizational practices to deal with uncertainty and anticipated disasters. If regularities emerge here, for example with regard to security organizations, the question of the effects of such processes also arises. Analogous to the “economization” of not primarily economically oriented organizations, are there equivalent processes in companies through adaptation of elements foreign to this organizational type?

Closely related to this are approaches focusing on the relationality of risk (e.g., Boholm & Corvellec, 2011), which sensitize for different risk assessments between various economic and/or other social organizations and their effect on inner-organizational routines. Such organizational techniques are not plainly adopted but are continuously modified through translation processes (Callon, 1986) between and inside (economic) organizations. Taking the example of the German Statistical Office (Destatis), it generally adopts a transparency-oriented attitude toward the notion of risk transfer in public-private cofinancing arrangements: It went for an exceptional solution on the question of how to account for the German “bad banks” under the Stability and Growth Pact regime. It argued for the risk-practice to introduce an on-government balance sheet solution, which was highly debated at the time (Gandrud & Hallerberg, 2014). What we can see from this example is that the notion of risk transfer is open to various interpretations. The room for interpretation emerges from a tension between different institutional demands; in this case: the requirement for financial discipline on the one hand, and the requirement for financial creativity on the other hand. As such, depending on the organizational culture and its primary focus (either financial creativity or financial discipline), the risk practice to follow an on-government balance sheet solution is not simply copied but modified and translated (Knoll & Senge, 2019). Lange and von Scheve call such forms of relations and translations “risk-entanglement” (Lange & Scheve, 2022).

#### 4. Performative consequences of coping with uncertainty: the company on trial?

Finally, the question of organizational management of the future is socio-politically relevant. Organizations and especially companies are seen as central producers but also as processors of risks and uncertainties. Hence, it seems important to elaborate the performative consequences of the used (or unused) modes of uncertainty assessment and management. The thesis of performativity refers in particular to the fact that economic theory and formal economic models do not simply represent economic phenomena, but also produce them (Preda, 2007, p. 522). In addition to the research by MacKenzie and Millo (2003), Esposito's insights are particularly relevant with regard to risk management and uncertainty. She shows how risk management models, as attempts to control the future, co-generate the future they address, as they and the techniques and models on which they are based for assessing and pricing future risks are observed by other market participants as observations of the future in the sense of second-order observation - a fact that is not taken into account by these forms of control. This creates new uncertainties with sometimes considerable consequences like financial crises (Esposito, 2013, p. 119 ff.). Holzer and Millo make a similar argument, recognizing attempts at risk management on financial markets as a source of new uncertainties and thus as "second-order dangers" (Holzer & Millo, 2005).

Such findings focus attention on the social and crisis-related effects of risk practices of economic organizations. At the same time, another aspect appears relevant in this context. For example with regard to the Covid-19 pandemic, it seems worth discussing to what extent the increasing scientific, political, and mass-media produced focus on uncertainty fuels expectations regarding the accomplishments of economic organizations in dealing with these problems. This question is especially significant as companies are generally seen as "strong" actors (Brunsson & Sahlin-Andersson, 2000, p. 731). Just as the question of the effects of such crises on statehood is raised (e.g., Curran, 2022), it is instructive to observe to what extent and in which ways observable organizational forms of dealing with risks and uncertainty as well as corresponding successes and failures affect the scientific and public discussion and the existence of the company as type of organization (Mayer, 2021).

#### 5. Contributions

Based on these research questions and topics, with this Special Issue, we intend to bring economic organizations back into analytical focus – as drivers and likewise as managers of uncertainty and risk in times of crises. The contributions are linked to this goal in various ways:

Tom Duterme's article deals with inflation targets as central devices for managing inflation risks. The focus is on the finding that these devices, which are used by central banks, often take the form of vague quantifications, contrary to recommendations by economists. Duterme's contribution points out already known explanations and, based on a historical case study of the Belgian Central Bank, presents a further explanatory approach: the quantitative ambiguity of inflation targets enables achievements of intra- and interorganizational compromises. Duterme thus focuses on uncertainty management techniques of central banks and emphasizes that the illumination of the organizational dimension of central banks as central economic actors can lead to new insights into the management of the current crisis phenomenon of inflation.

Jarle Bastesen, Birthe Kårfjord Lange and Bent Sofus Tranøy address the term "new normal" in their contribution. This term has recently been used in academic literature for making sense of a world characterized by unpredictability, complexity and poly-crises. Based on an integrative literature review in management and government-oriented academic journals, the authors examine the meanings associated with the under-defined term of the "new normal". Two variants emerge: the new normal as a new steady state and the new normal as a state of constant

flux. Building on these findings, the research question is raised what these conceptualizations mean for thinking about business organization and strategy. It is shown that the conceptualizations are linked to different practical implications, for example with regard to strategic time horizons or leadership in organizations. At the same time, the authors clearly sensitize for the ambiguous understandings as well as the various functions of the term "new normal", which is relevant for both the analytical and practical value of this term in strategic planning and management.

Both contributions thus demonstrate the productivity of (empirical) research at the interface of socio-economic processes and economic organizations to understand forms of dealing with uncertainty and crises-related dynamics.

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