

Framing risk governance

Volker Stein

*Department of Human Resource Management and Organizational Behavior,
University of Siegen, Siegen, Germany, and*

Arnd Wiedemann and Christiane Bouten

Department of Finance and Banking, University of Siegen, Siegen, Germany

Framing risk
governance

Received 28 January 2019
Revised 3 May 2019
9 July 2019
Accepted 19 September 2019

Abstract

Purpose – The purpose of this paper is to apply the concept of framing in the field of risk governance and risk management research.

Design/methodology/approach – A five-constituent approach to framing – cognitive, strategic, action, emotional and institutional framing – is applied to contrastively analyze the multifaceted character of the two concepts of risk governance and risk management.

Findings – This paper analyzes the multifaceted utilization of risk governance framing and the conscious demarcation between risk governance and risk management. Risk governance framing strengthens the proactive control of strategic risks with regard to business model adaptation to changing risk landscapes. The verbal imagery of risk governance already sets the agenda for the sustainability-oriented as well as value-oriented steering of the risks of a business model. Following the analysis of the different framing areas, propositions are presented.

Originality/value – Although framing is applied in various academic disciplines, there is limited research relating to corporate risks. While risk governance provides companies with a concept to ensure the sustainability of their business models in the complex risk landscape, the related framing brings the appropriate interpretation and the deliberate tone into focus.

Keywords Framing, Business model, Strategic management, Risk management, Risk governance

Paper type General review

1. Introduction

In strategic management, one of the most crucial tasks is to shape, establish and maintain a sustainable business model. The actors involved, i.e. top management, supervisory bodies and employees, have to cope with a broad range of uncertainties and risks. Stabilizing the firm's business model, in particular if it is under external or organizational pressure, is one of the recently discussed leadership competences called “dynamic capabilities” (Teece, 2018). It refers to conscious strategic responses in terms of reconfiguring resources and readapting the business model when the risk landscape changes.

Top management is responsible for the preservation of a viable business model and, therefore, has to organize the processes of gaining control over the risks. The first option is to delegate responsibility by mandating the risk management department with the monitoring and mitigation of risks. However – “out of sight, out of mind” – this might endanger business model safeguarding at the top, as well-functioning risk management, aiming at avoiding risk on-site (Ojiako, 2012), filters out a lot of risk information (and coexisting opportunity information) that might be key to business model adaptation at the top level of decision-making. With regard to the given dependence on the situative context, a maturity model reflecting the firm's ability for continuous improvement in risk work differentiates risk management processes (Farrell and Gallagher, 2015) with maturity levels ranging from traditional “silo” risk management to an integrated risk management such as



Enterprise Risk Management (ERM) with a company-wide portfolio view of all risks (Kimbrough and Compton, 2009; Grace *et al.*, 2014). But although Mikes (2009) describes several ideal types of ERM with varying focus and purpose, Simona-Iulia (2014) still comes to the conclusion that ERM “is an improved version of the traditional risk management, created by expanding its scope” (Simona-Iulia, 2014, p. 282). Recent management research stressing pitfalls related to risk management and ERM (Bromiley *et al.*, 2015) leads to the second option for top management: setting up “risk governance” (Stein and Wiedemann, 2016). This approach ensures that top management still receives risk information from all corporate levels to integrate it into its decisions on business model adaptation and, therefore, strengthens the set of the company’s robustness-increasing measures, i.e. resilience management. Lundqvist (2015) shows the “implementation of risk governance is the active step beyond traditional risk management to ERM” (Lundqvist, 2015, p. 441).

The breadth of conceptual understandings with regard to traditional risk management, ERM, and risk governance – a topic that will be touched upon below – may result in messy overlaps that are likely to exist also in managerial minds. But the terminology in which protagonists talk about risk-related management questions also makes a difference. This very point is the main insight from the research on framing (Allan *et al.*, 2010; Lakoff and Wehling, 2016): There are different ways to address the same issue, and completely different reactions can be induced depending on the way in which an issue is phrased (Entman, 1993).

In the context of business model risk steering, we can scrutinize both options: Which type of framing, i.e. “the language of risk management” or “the language of risk governance”, is more appropriate for a top management that is striving to meet its responsibility for ensuring business model sustainability and, at the same time, seeking to make that responsibility company-wide?

The objective of this paper is to contribute to a broader awareness of framing in risk steering. Existing overlapping conceptual designs of risk management and risk governance can result in ambiguity for managers about actors and roles when talking about risks. Our research aims at clarifying when it is best to speak about risk governance and when it is best to speak about risk management against the background of different risk management implementation stages.

The paper is structured as follows. After introducing the theoretical foundations of framing and risk governance, we will contrast risk governance framing with risk management framings, leading to five pairs of propositions. We will be able to show that the consciously designed framing of risk governance has distinct comparative advantages in the context of successful business model adaptation, both for top management and for the organization as a whole.

2. Theoretical background

2.1 Framing

2.1.1 Evolution and definition of framing. Framing theory has considerable traction in communication and organizational theory. As early as Burke (1937) made use of the construct of framing in a macro-sociological, historical context. The text *Frame Analysis* by the sociologist Goffman (1974), inspired by Bateson’s (1972) concept of psycho-social frames, has become fundamental to social science, describing with regards to meta-communication how individuals experience a situation and how an interpersonal consensus about the nature of this social reality can be found. In the 1970s, the concept of framing evolved as an area of interdisciplinary research and drew attention in psychology, linguistics, politics, sociology, economics, journalism and mass communication (Cornelissen and Werner, 2014).

Consequently, definitions of framing are diverse and depend on the related research. In terms of a general definition spanning all fields, a frame is defined as “principles of organization which govern the subjective meanings we assign to social events” (Goffman, 1974, p. 11), which indicates that framing is the process of defining a frame. In a process-related definition, framing is about:

[selecting] some aspects of a perceived reality and [making] them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described (Entman, 1993, p. 52).

As a result of the evolution of framing, different research areas use this concept, among them cognition and decision-making (Goffman, 1974; Argyris *et al.*, 1985), strategic analysis (Allison, 1971) and the evolution of science and technology (Kuhn, 1970; Dunbar *et al.*, 1996). In this paper – and because the conceptual cores of the alternative framing concepts are similar – we do not focus on one single research tradition but instead base our analysis on a broad, comprehensive understanding of framing.

2.1.2 Framing process. Taking the action perspective, framing is, first, a psychological process by that misalignment of interests in organizations can be socio-cognitively mitigated (Donohue, 2011). Framing is, second, an interactional, communicative process accomplished by the use of language, and language in turn impacts social interaction (Dewulf *et al.*, 2009; Gray *et al.*, 2015) and develops meaning (Benford and Snow, 2000; Purdy *et al.*, 2017) through bidirectional negotiation of individual framing over time (Carnevale, 2011).

Entman (1993) described four components of the framing process, namely communicator, text, receiver, and culture. The communicator consciously or unconsciously decides what to say and makes a choice of words and frames. The message is then transmitted through text, which may contain certain keywords, stock phrases or stereotypes. The receiver’s interpretation of the framed text might differ from the communicator’s original intention. Finally, culture represents the accepted set of framings within a group of people. In the framing process, through the selecting function of framing, a piece of information can be made more salient, noticeable, meaningful or memorable. This might increase the probability that the receiver perceives the information as intended and stores it in memory (Entman, 1993).

2.1.3 Functionality of framing. In organizational contexts, framing has been extensively used for the explanation of individual sense-making (Lewicki and Brinsfield, 2011; Cornelissen and Werner, 2014), resulting in a memory structure used to organize and interpret experiences (Perri 6, 2005). Framing has been analyzed by risk researchers to get insights into what is accepted as legitimate (Allan *et al.*, 2010). Morgan *et al.* (2002) showed that any kind of frame is used to think about and recognize risks. At the collective level, framing aims at collective reality construction, interpretation, and action (Steinberg, 1998; Benford and Snow, 2000). Some researchers stress that framing has a manipulative downside (Kelly, 2017; Litrico and David, 2017; Purdy *et al.*, 2017; Seo and Dillard, 2017); however, this is inherent to any communication, just as Watzlawick pointed out: “One cannot not communicate” (Watzlawick *et al.*, 1967, p. 51).

Framing is also applied to guide individual decision-making (Nutt, 1998; Litrico and David, 2017). One of the most cited study in this context is the experiment by Kahneman and Tversky (1981) that was based on the premise of the expectancy theory, which states that different representations of the same choice problem should yield the same preference. Subjects were confronted with the following situation: the country is preparing for the

outbreak of an unusual disease that is expected to kill 600 people. The subjects were asked to choose between two alternative countermeasures, A and B. In the first formulation, the term “save” was used (A: 200 people saved; B: 1/3 probability that 600 people will be saved and 2/3 probability that no people will be saved). In a second formulation, the same outcome was described in terms of lost lives (A: 400 people will die; B: 1/3 probability that nobody will die and 2/3 probability that 600 people will die). Subjects decided completely differently in the two cases, preferring A in the first formulation and B in the second formulation, which shows that framing influences risk aversion. Various other studies in finance and risk research, customized in terms of context and the degree of complexity, have been conducted to prove this phenomenon (Kirchler *et al.*, 2005). Therefore, framing can be used as a tool for influencing strategic behavior.

2.2 Risk governance

2.2.1 Evolution of risk governance. The first papers relating to risk governance were published around the turn of the millennium (Elliott, 2001; Heriard-Dubreuil, 2001). Originally, the European Commission addressed the topic of risk governance in the context of a Science and Society Plan as a macro-societal challenge (van Asselt and Renn, 2011). Following the establishment of the International Risk Governance Council (IRGC) in 2003, risk governance raised its awareness in the macroeconomic context (van Asselt and Renn, 2011), being expected to support governments, industries and non-governmental organizations in the management of external risks from the natural, societal and technological environment, such as disposal of nuclear waste, climate change, bad harvests or pandemics (Klinke and Renn, 2012). Identification, measurement, management and reporting of risks were to be taken in light of future systemic consequences [International Risk Governance Council (IRGC), 2005], resulting in a policy-oriented risk governance framework (Florin, 2013).

In particular as an answer to the financial crisis, the term risk governance has been transferred also to the microeconomic context. Notably in the banking sector, risk governance became of special interest when the European Central Bank implemented this terminology in 2016 in the course of the release of the Supervisory Review and Evaluation Process (European Central Bank, 2016). With regard to financial institutions, risk governance was introduced “as the framework through which the board and management establish the firm’s strategy, articulate and monitor adherence to risk appetite and risk limits, and identify, measure and manage risks” (Gontarek, 2016, p. 120). This signification was still very similar to traditional risk management that is tightly related to internal control with objectives focusing on operations, reporting, and compliance. Seeking to broaden traditional risk management in a strategic sense, Lundqvist (2015) was one of the first academics to demand additional governance functionalities that had, up until then, been missing in traditional risk management. Her idea was to refine one of the most popular ERM frameworks, the US-based “Enterprise Risk Management – Integrated Framework” published by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004), as a governance-improved risk management function. Yet, the three COSO internal control objectives of risk management could be found, extended by strategic objectives. In 2017, the updated version of this framework was renamed “Enterprise Risk Management – Integrating with Strategy and Performance”. Even this enlarged ERM maintained the problem that businesses had all sorts of risk-mitigating functions at the operative level but persistently failed to cope with risks that affected the overall business model at the strategic level (Stein and Wiedemann, 2018). For example, how could it still be possible that companies that invested huge amounts of money in risk management and

ERM, “suddenly” faced thousands of charges and lawsuits (Comfort and Choudhury, 2016 in conjunction with Leidner and Lenz, 2017) that actually endangered their survivability?

Obviously, the emergence of risk governance in the organizational context was driven by failures and weaknesses in both risk management and corporate governance that had originally been intended to protect the organization from all kinds of risks threatening its sustainability. In this paper, we will not enter into detailed criticism of corporate governance and risk management (Stein and Wiedemann, 2016). It is, however, important to emphasize that risk management, which is defined as the process of identification, measurement, analysis, and control of risk, focuses on reducing risk by sophisticated quantitative modelling, above all in the finance industries (Hardy and Maguire, 2016). Standardization of risk models and risk management processes leads to a rather mechanistic risk management that is perceived as effective if it filters out all or as many as possible of the risks and controls them, keeping them away from top management. Unfortunately, top management then is no longer able to integrate the – now missing – risk information into its strategic decisions for the future (Stein and Wiedemann, 2018). At the same time, corporate governance cannot fill this gap, as many of the country-specific regulations have a narrow focus on risks related to leadership disability, regulatory compliance, and lack of transparency (Gericke, 2018) and corporate governance is largely malleable for companies and is often conceptualized as a tick-box approach (Arcot and Bruno, 2007), with no explicit focus on business-model-related risk control.

Necessary further developments will have to reflect the rationale that “the risk landscape of a corporation has to be captured holistically and circulated to the top management as the final decision-makers on corporate strategy” (Hiebl *et al.*, 2018, p. 318). At this point, country-specific particularities of different management traditions, supervision systems, and corporate governance come into play. Apart from national regulations, however, many foundations of management responsibilities and actions are internationally accepted and approved so that in the following we will talk about the core of risk-related steering that is generally accepted.

2.2.2 Definition of risk governance. In recent years, the corporate pursuit of controlling risk has seen several unfortunate developments. Volkswagen’s emissions scandal and the abundance of lawsuits surrounding Walmart mark only two prominent examples of large companies. In both cases, neither the mechanisms of corporate governance nor those of risk management – and both functions were equipped with the utmost possible resources – have reacted sufficiently to the threats that the companies were exposed to. Consolidating operative and strategic risk for the sake of controlling risk as a whole appears to be the central problem since, when considered individually, both risk management as well as corporate governance are subject to constant change and development. The prevailing (structure-driven) corporate governance and (process-driven) risk management seem insufficiently coordinated, i.e. have evolved into two coexistent but isolated pillars. Literature on current research seems to back this observation: Papers on risk management predominantly appear in journals of finance and accounting (Bromiley *et al.*, 2015, p. 265), whereas research on corporate governance seems associated mainly with the fields of business law and business ethics.

The core of this question how to reunite two streams of theory and practice has not yet led to a general consensus as there are three possible solutions for the problem:

- (1) Subsuming risk management under corporate governance; this solution attracts only minor attention in research (Sassen, 2014) since corporate governance tends to approach the qualitatively oriented field of legal studies rather than the quantitative field of risk management research.

-
- (2) Subsuming corporate governance under risk management; this is the approach ERM takes ([Arnold et al., 2012](#)) that is attributed the leading and controlling role in risk steering which determines structures, responsibilities, authorization, and roles for decision-making ([Lundqvist, 2015](#), p. 442), clearly addressing elements of corporate governance.
 - (3) Closing the gap; this solution makes the attempt of bridging risk management and corporate governance by leaving the two pillars highly specialized, while drawing a conceptual connection between their respective steering deficits.
-

Risk governance bases its legitimization on the revealing of deficits in the steering of risk that are related to the business model. While accusing operative risk management of possessing a standardized constriction, it illustrates that corporate governance, over time, has become an instrument of specifying management accountability rather than an actual means of strategically controlling risk. A company's management then is inclined to merely "tick the boxes" to avoid managerial misconduct, and ensure compliance with regulations and transparency. Instead of enhancing either risk management or corporate governance, however, risk governance (this made-up word combines terms from each function) chooses solution (3): it serves as a mediator between the two functions without trying to replace either one. On the contrary, risk governance accepts the necessity of both risk management and corporate governance, but intends to solve their respective deficits in a complementary fashion by adding monitoring and advising functionalities and by organizing a hierarchy-spanning interconnection of risk assessment. In this sense, risk governance is first and foremost an overarching philosophy of controlling strategic business risk which aims at permeating a company with its stakeholder-oriented take on the issue ([Stein and Wiedemann, 2016](#), p. 813).

Risk governance can be defined as the firm's entirety of collaborative processes of interaction and decision-making among the actors involved in the collective problem of controlling the risk-related complexity in its internal and external environment. It aims at adapting the business model to changing risk landscapes to maintain the firm's sustainability and ongoing value creation.

In practice, this means bridging the gap between risk management which is located within the operating departments and management-born corporate governance. Risk governance seeks to use the risks recognized in operation to support the management in making basic decisions regarding the company's business model, thus rendering those decisions (not only in theory) strategically relevant. [Stein and Wiedemann \(2016\)](#) attribute to risk governance four central tasks: designing risk models for the company, determining model risks, adapting progress in risk research to the specific conditions of the firm, and providing top management with various risk perceptions so that it will be able to integrate this into its decision-making on business model adaptation. With its four tasks, risk governance forces the management to continuously align the business model with the prevailing risk environment. With regards to concrete goals, milestones, the relevant stakeholders' goals and interests, the availability of resources and incentive systems, this alignment is to initiate a reorientation of future strategies, or even a revision of current ones.

Applying risk governance is intended to help top management keep track of the variety of interlinked risks threatening the organization's business model, in particular in the era of digitization, social media, and real-time information processing. The interconnection of organizations, society and technology is shaping a new risk landscape which in turn impacts top management activities of seeking a sustainable future for their companies. In

the following, the constituents of risk governance will be specified in the sense of framing objects.

3. Research model

Conceptually, in this paper, we will specify the framing of risk governance. We will show how risk governance protagonists have intentionally shaped five types of framing: cognitive, strategic, action, emotional, and institutional. Taken together, these five types of framing, besides of representing the diagnostic, prognostic and motivational core framing tasks characterized by [Snow and Benford \(1988\)](#), cover all aspects of a concept's usability for management purposes:

- what it is (cognitive);
- which intent it has (strategic);
- how to use it (action);
- how to feel about it (emotional); and
- how to fit it into intra-organizational and external systems (institutional)

We will contrast this with the respective framing used by risk management protagonists, to clarify the distinctions. For a more granular analysis, we will differentiate between three risk management maturity levels: first, a basic risk management which focuses on isolated analyzes of individual risks (the risk silo conceptualization); second, an integrated risk management; and third, a holistic risk management.

Methodically, we will base our analysis on recent literature from the fields of risk governance and risk management, applying a four-step argumentation. We will start by providing the theoretical explanation on the framing category. On this basis, this type of framing will be applied to risk governance on the one hand and risk management on the other. We will conclude by deriving propositions that tentatively relate both risk governance and risk management to its respective value contribution. Their wording indicates that firms can choose to frame their risk work in a particular manner. Firms talking about, using, or implementing the risk governance framing will impact risk work in a particular way that will in the different framing dimensions lead to different effects in comparison to those firms using the risk management framing.

4. Contrastive analysis of risk governance framing

4.1 Cognitive framing

Cognitive framing aims at establishing a knowledge structure that helps individuals organize and interpret new experiences ([Lewicki and Brinsfield, 2011](#)). It also directs and guides information processing ([Cornelissen and Werner, 2014](#)) by forming the basis for a consistent understanding of a specific terminology. [Kaplan \(2008\)](#) stresses the importance of cognitive framing in periods of high uncertainty where it becomes central to strategy-making processes as it directs managerial attention and thus influences a company's response to changing circumstances.

Cognitive framing of risk governance points to what risk governance intends to be: the missing link between risk management and corporate governance. That is why the term risk governance combines one word each from risk management and corporate governance. However, risk governance means more than simply blending the both terms. The deliberate connotation refers to the underlying complexity of relating risk steering with the permanent dynamic adaptation of the business model at the strategic level of an open organization. Risk

governance is to be understood as a fundamental steering philosophy demarcated from traditional risk management and corporate governance (Stein and Wiedemann, 2018), embedding it as a cornerstone of contemporary corporate management: “Risk governance, based on dynamic capabilities, will serve as an internal consultant and as a motor for increasing the company’s potential for strategic agility” (Stein and Wiedemann, 2016, p. 828).

In contrast, cognitive framing of risk management limits it to a rather mechanistic approach that is concentrated on a broad variety of coping strategies for the mitigation and minimization of the risk effects mainly without addressing the underlying causes and uncertainties (Field *et al.*, 2006). Risk as the object of risk management activities appears to be an end in itself which is other than a means to an end, i.e. the business model. The cognitive framing of risk management becomes visible within the language of the widely standardized processes of identification, assessment, planning, avoidance or reduction and reporting of risks that are adhered to strict process stages and to a predefined risk policy (Aven, 2016). Broken down by maturity level, the mechanistic mitigation relates to single risks (basic), risk portfolios (integrated) or risk networks (holistic). The downside of this approach is that relying on a standardized framework can lead to uncovered risks in periods of change (Dunbar *et al.*, 1996). For instance, in the context of digital transformation, new types of risks emerge that may impact the business model of any organization but are not yet covered by risk management processes (Loebbecke and Picot, 2015). Framing of traditional risk management is not – and framing of holistic risk management such as ERM is only to some extent (Farrell and Gallagher, 2015) – directed towards early warning functions that discover emerging risks, and especially not those related to the overall business model, at an early stage.

Thus, we propose the following:

- P1a.* Firms applying the cognitive framing of risk governance direct the usage of firm resources towards risk-related adaptive steering of the business model.
- P1b.* Firms applying the cognitive framing of risk management direct the usage of firm resources towards mitigating and minimizing risks.

4.2 Strategic framing

Strategic framing sets the focus on purpose, intent, and functionality. It elaborates “how – through language and symbolic gestures – strategic actors attempt to frame courses of actions and social identities to mobilize others to follow suit” (Cornelissen and Werner, 2014, pp. 182-183). This means that strategic framing refers to a “set of cause-effect understandings about industry boundaries, competitive rules and strategy-environment relationships available to a group of related firms in an industry” (Nadkarni and Narayanan, 2007, p. 689). It contributes to the construction and negotiation of shared meaning, assuming that a common understanding of particular courses of action and their effects will emerge through interaction over time (Dewulf *et al.*, 2009; Benner and Tripsas, 2012).

Strategic framing of risk governance highlights its purpose of long-term value creation and business model sustainability to mobilize trust and, subsequently retention, of a wide range of external investors and internal human resources. For example, risk governance framing calls to initiate the process by that a company is permeated by stakeholder-oriented risk control from a strategic perspective (Stein and Wiedemann, 2018), making the 360 degree alertness a normality in the corporate self-conception. That broad perspective, demanding risk detection in terms of the “unknown unknowns” (Luft and Ingham, 1955)

from everybody involved in the corporate system, ensures that the interests of employees, managers, suppliers, and numerous other stakeholders are each considered equally relevant for business model adaptation and, therefore, corporate development. Risk governance is framed as an integrative approach which aims at sending clear ethical signals to every stakeholder underlining the dominant significance of risk-related sustainability (Stein and Wiedemann, 2016).

Strategic framing of risk management points to its purpose to build up a control system that ensures risk immunity for the corporate system so that business processes will continue to run smoothly. Even a more mature risk management approach like the integrated risk management restricts the stakeholders that are addressed to intra-organizational functions such as finance, managerial accounting and internal auditing as well as to external supervisory authorities of the respective industry. Linguistic expression is deployed to appreciate financial stability and liquidity rather than corporate development in uncertain times (de Mailly Nesle, 2015), and the language used is the language of figures. Looking at financial institutions for example in Europe, banks are obliged to establish an elaborate risk management function and an explicit risk strategy (European Banking Authority, 2017) to avoid financial risks. This risk strategy covers risk management objectives for the key business activities and corresponding quantitative metrics and calculations as well as prescribed risk reporting (Federal Financial Supervisory Authority (BaFin), 2017). Basic risk management is related to known risks and predefined measures of financial stability that have to be met (Gericke, 2018). The integrated risk management directs its strategic framing to risk aggregation and adds the enhancement of (financial) stakeholder value, while holistic risk management considers emerging risks (Mikes and Kaplan, 2015) and financial stability forecasting with quantitative risk assessment still being prevalent.

We therefore propose:

- P2a.* Firms applying the strategic framing of risk governance create stakeholders' trust in long-term corporate development in uncertain times.
- P2b.* Firms applying the strategic framing of risk management create stakeholders' trust in financial stability and liquidity in uncertain times.

4.3 Action framing

Action framing is the creation of action-oriented sets of beliefs and meanings (Benford and Snow, 2000) aimed at simplifying and condensing aspects of the "world out there" to tell people what they should do and how to use what they have acquired through cognitive framing. Action framing results in people becoming active drivers of a particular idea (Snow and Benford, 1988).

Referring to risk governance, action framing emphasizes the core activities of risk governance, consisting of four clear-cut tasks (Stein and Wiedemann, 2016):

- (1) the design of a set of alternative risk models to broaden top management's perception of potential future risks and overcome the prevalence of merely reactive risk models;
- (2) the determination of model risks, in particular those resulting from risk models if incorrectly specified, or inapplicable or incorrectly implemented;

MRR

- (3) proactive “research and development” on risk issues to ensure awareness of potential future risks and benefits from recent advances in risk research and practice; and
- (4) internal risk consultancy for top management, i.e. taking responsibility for communicating the various risk perceptions so that top management is able to integrate them into its decision-making on business model adaptation.

Taken together, action framing of risk governance is a demand for organic mental openness to anticipating systemic change and urges corporate actors to permanently re-contextualize business model risk steering as the consequence of an ongoing risk screening. Furthermore, it gives corporate risk culture a specific flavor of collective responsibility and proactivity.

Action framing of risk management primarily takes up the terminology of the international standard [ISO 31000 \(2009\)](#) for risk management from 2009, recently updated in 2018. As a generic standard, ISO 31000 gives general guidance on risk management architecture, principles, framework and process. The seven core activities of risk management are:

- (1) avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk;
- (2) accepting or increasing the risk to pursue an opportunity;
- (3) removing the risk source;
- (4) changing the likelihood;
- (5) changing the consequences;
- (6) sharing the risk with another party or parties (including contracts and risk financing); and
- (7) retaining the risk by informed decision.

Risk management activities are directed towards reactive routine operations with a rather reductionist mentality and mechanistic notion. This applies to all three risk management maturity levels, with holistic risk management especially focusing on process transparency ([Oliva, 2016](#)) and building up organizational slack as a reserve to mitigate risks ([Chopra and Sodhi, 2004](#)).

Thus:

- P3a.* Firms applying the action framing of risk governance evoke the comprehension of risk steering as a systemic and organic approach in an open realm of experience.
- P3b.* Firms applying the action framing of risk management evoke the comprehension of risk steering as a reductionist and mechanistic approach in a default process.

4.4 Emotional framing

Emotional framing is making something attractive to get the involved people commit themselves and also refers to “moral imagination” ([Werhane, 1998](#)) to broaden one’s mental mindset. Habitual language and positively connoted cultural symbols can be used to create common ground and to motivate others to cooperate ([Fligstein, 2001](#)), and using emotional framing is expected to raise the individual level of alertness and recall of information ([Strongman and Russell, 1986](#)). Emotional framing plays an important role in the affective perception and comprehension of potential risks ([Choi and Lin, 2008](#)).

There are two components in risk governance emotional framing: First, the sustainability of the business model provokes positive resonance because the connotation of sustainability is social responsibility, ethics, transparency, humanity, ecology and safe workplace (Carroll, 1999; McWilliams and Siegel, 2001) which is altogether the basis for contemporary organizational legitimacy. By that, risk steering as a whole addresses not only dangers but also opportunities for maintaining a successful company. Second, the intended value creation through overall risk robustness triggers positive associations both with economic value and with cultural values in the sense of risk culture, combining economic metrics with desirable culture (Gibbons and Kaplan, 2015). This is the necessary condition for long-term success and organizational viability.

Emotional framing in risk management differs in its affective focus that is directed towards threat and its avoidance. Risk management is praised effective if it achieves the de-risking within a risk appetite or even the far-reaching absence of dangers rather than the creation of opportunities, even if integrated risk management generates a comprehensive list of risks that might jeopardize the company's achievement of objectives, or holistic risk management strives to take non-quantifiable and emerging risks into consideration in the sense of developing alternative future risk scenarios, i.e. "risk envisionment" (Mikes, 2011, p. 226). Furthermore, risk management framing emotionally communicates time pressure: For example, the value-at-risk measure as one of the most cited techniques in risk management (Jorion, 2007) is limited to a short period, such as one to ten days for market risks (Dias, 2013). In financial institutions, the obligatory 12-month forecast for internal capital adequacy planning (Federal Financial Supervisory Authority (BaFin), 2017) is already perceived long-term.

We therefore propose:

- P4a.* Firms applying the emotional framing of risk governance help management and employees increase their motivation and self-efficacy in shaping the company's future.
- P4b.* Firms applying the emotional framing of risk management help management and employees increase their motivation and self-efficacy in averting damage to the company.

4.5 Institutional framing

Institutional framing influences people on how to connect a process with internal and external structural conditions of an organizational system. Institutional framing "scripts behaviors in an institutional field" (Cornelissen and Werner, 2014, p. 185). This involves the "creation of shared conceptions" (Scott, 2003, p. 880). Going beyond intra-organizational institutionalization, institutional framing is used to "provide macro-structural underpinning for actors' motivations, cognitions, and discourse at a micro level" (Cornelissen and Werner, 2014, p. 206). This implies that framing on one institution can be concatenated with the framing on related institutions, clustering the respective frames (Schön and Rein, 1994).

Institutional framing of risk governance operates in the direction of decentralized involvement and participation. It is a fundamental insight from cybernetics that for a complex system in a changing environment to be stable, the number of states that its control mechanism is capable of attaining, i.e. its repertoire of responses to challenges or "variety", must be greater than or equal to the number of states in the system being controlled – or, as Ashby (1956) framed his famous law of requisite variety, only variety can absorb variety. Therefore, institutional framing of risk governance accentuates additional control

mechanisms and structural coping capacities such as interfaces between top management and the overall system of internal and external monitoring and supervision, or intensified flows of information from and to internal and external supervisory bodies. For example, it strengthens the conceptualization of intra-organizational risk governance circles (Stein *et al.*, 2018b), which are comparable to quality management circles (Adam, 1991). Those circles consist of employees from across the company who discuss their risk perception and their assessments of the consequences of risks for the business model. The claim “every employee is a risk owner” reflects the crucial role of individual instincts and experiences. The risk governance circle is invited to collect potentially relevant information and to communicate it to the top management so that it will benefit from comprehensive risk-related information without being overloaded (Stein *et al.*, 2018b). Top management has to react to that information, both by considering it for the business model and by giving feedback to the risk governance circle. In creating problem-solving variety, institutional framing coins risk governance as the core of a participative business risk monitoring and supervision system with mutual assumption of responsibility.

Institutional framing of risk management is usually embedded in a top-down approach (Gericke, 2018). In many organizations, especially in financial institutions, responsibility for the risk management process is assigned to a Chief Risk Officer (CRO) (Gontarek, 2016). Although the CRO is a member of the board, this does not necessarily ensure that top management is aware of all relevant risk information needed for its decision-making. Furthermore, at a basic risk management level, isolated groups of individuals with a silo mentality in risk management (Lundqvist, 2015) may focus on single risks, leaving organization-wide risk management an incoherent patchwork (Bromiley *et al.*, 2015). To overcome this obstacle, integrated risk management intends to consolidate all (quantifiable) risks to one risk statement. While it takes into account diversification effects and links risk management with performance measurement (Mikes, 2009), non-quantifiable strategic risks fade into the background. At the highest maturity level of risk management, companies aim with the holistic risk management approach at further improving their processes and standardizing a company-wide framework (Oliva, 2016). Taken together, creating anytime financial security in a centralistic approach advocates massive reduction of problem-solving variety for the single decision makers not to overstrain them.

This enables the formulation of the following propositions:

- P5a.* Firms applying the institutional framing of risk governance promote the establishment of participative steering of business model risks by purposely supporting investments in additional problem-solving variety.
- P5b.* Firms applying the institutional framing of risk management promote the establishment of centralized steering of (financial) risks by purposely supporting investments in the reduction of problem-solving variety.

5. Discussion

Deliberate framing with regard to risk steering has yet remained largely unexamined, leaving room for interpreting the subtle connotations that both of the terms risk governance and risk management can sometimes convey. Based on a five-constituent framing approach, our research suggests a comprehensive risk governance terminology that makes clear when it is best to speak about risk governance and when it is best to speak about risk management. Contrasting risk governance framing with risk management framing allows a distinction to be drawn between the two concepts (Table I), reducing existing ambiguity.

Framing category	Risk governance	Maturity level: Basic silo risk management	Risk management Maturity level: Integrated risk management	Maturity level: Holistic risk management
Cognitive framing	Risk-related adaptive steering of the business model	Mitigation and minimization of single risks	Mitigation and minimization of risk portfolios	Mitigation and minimization of risk networks
Strategic framing	Broad stakeholder focus, aimed at corporate development	Limited stakeholder focus, aimed at financial stability and liquidity	Limited stakeholder focus, aimed at financial stakeholder value	Limited stakeholder focus, aimed at financial stability forecasting
Action framing	Systemic and organic approach in an open realm of experience (strategic, proactive)	Reductionist and mechanistic approach in a default process (operative, reactive)	Reductionist and mechanistic approach in a default process (operative, predefined)	Reductionist and mechanistic approach in a default process (strategic, predefined)
Emotional framing	Positive connotation of long-term sustainability (social responsibility, ethics, transparency, etc.) and values (economic, cultural)	Positive connotation of short-term avoidance of threats and damage	Positive connotation of short-term avoidance of threats and damage	Positive connotation of time pressure
Institutional framing	Support of investments in additional problem-solving variety, "every employee is a risk owner", participative approach	Support of investments in the reduction of problem-solving variety by justifying top-down standardization, silo mentality, no company-wide consistency, centralistic approach	Support of investments in the reduction of problem-solving variety by justifying top-down standardization, Chief Risk Officer, risk-based performance measurement, centralistic approach	Support of investments in the reduction of problem-solving variety by justifying top-down standardization, Chief Risk Officer, company-wide framework, centralistic approach

Table I.
Comparison of risk
governance framing
and risk
management framing

Of course, the paper has some limitations. Conceptually, we used a risk management maturity model, but as part of our argumentation, ERM and the COSO framework adopting own techniques and templates of risk management framing are not considered in detail. According to COSO's information, its risk management process which "provides the right framework for boards to assess risk and embrace a mindset of resilience" ([Committee of Sponsoring Organizations of the Treadway Commission \(COSO\), 2017](#), p. 2) has gained broad acceptance by organizations. The updated and retitled publication ([Committee of Sponsoring Organizations of the Treadway Commission \(COSO\), 2018](#)) promises to more clearly connect ERM with a multitude of stakeholder expectations and postulates risks to be positioned in the context of organizational performance which in turn enables organizations to better anticipate risk. Within the scope of the paper, alternative ERM frameworks ([Rubino, 2018](#)) have also not been considered. The second limitation is the up to now missing empirical testing of our theoretical propositions.

The emergent propositions for framing risk governance represent the authors' initial attempt to develop a terminology that may facilitate the distinction of different types of risk steering. Since propositions are declarations of associations between abstract constructs, it is clear that at this stage they represent no more than tentative theoretical relationships. As a conceptual basis, however, they will extend the understanding of two completely different rationales of risk steering and provide significant insights into how managers with different risk steering orientations may apply different framings and may form different risk control systems based on the same initial situation.

The development of propositions lays the ground for and highlights the need of further empirical studies in carefully specified contexts. Future researchers could test them in the form of hypotheses in various industry settings and across different firm sizes. In particular in financial industry, risk steering is subject to an enormous amount of supervisory regulations and restrictions which could make it an ideal area for investigating the varying proposed framing outcomes. Different cultural environments will as well have an effect on framing that is based on language and, therefore, on culture ([Kramsch, 1998](#)).

Methodologically, an obvious first step would be to test the propositions by applying qualitative research methods. As measuring management's framing activities and framing perceptions may be challenging, ethnographical methods of data collection ([Gobo and Molle, 2017](#)) could be applied, complemented by multiple triangulation techniques to avoid potential biases. Apart from interviewing managers, another way is to use secondary data that represents corporate communication on risk-related issues. The Enron email network ([Klimt and Yang, 2004](#)) seems to be an ideal case to assess management's communication and, therefore, framing on risk steering, since it covers the full email message texts and attachments of around one million Enron's staff emails between 1999 and 2003, originally made public in the internet by the Federal Energy Regulatory Commission during its investigation of the Enron bankruptcy of 2002.

6. Conclusion

This paper offers a range of contributions not only for research but also for companies and supervisory bodies. The exploration of potential consequences of framing the organization of risk steering as risk governance or risk management or a combination of both will allow for a more precise formation of corporate risk steering with all its actors and roles. This is in line with the premise of [Snow et al. \(1986\)](#) stating that frame alignment such as the frame amplification that we did it in our paper, is a necessary condition for micromobilization and participation of people in movements or change. Risk governance is applicable for all types of organizations, regardless of their risk management maturity level. Further, it opens new

perspectives for small and medium-sized organizations in particular (Stein *et al.*, 2018a) as those organizations focus on non-financial risks like growth risks and risks related to management and employee retention (Falkner and Hiebl, 2015).

In conclusion, risk governance as a recent development is just starting to find its way into companies and their corporate risk culture. The framing analysis has strengthened our conviction that the deliberate framing of risk governance might increase knowability of design alternatives, reduce uncertainty and make ambiguity slightly more controllable in the end. What definitely becomes clear in the end is, depending on how people talk about an issue, something different comes out. Based on that, we anticipate for risk governance to render companies more viable and sustainable for the future.

References

- Adam, E.E. (1991), "Quality circle performance", *Journal of Management*, Vol. 17 No. 1, pp. 25-39.
- Allan, S., Anderson, A. and Petersen, A. (2010), "Framing risk: nanotechnologies in the news", *Journal of Risk Research*, Vol. 13 No. 1, pp. 29-44.
- Allison, G.T. (1971), *Essence of Decision; Explaining the Cuban Missile Crisis*, Little, Brown and Co., Boston, MA.
- Arcot, S. and Bruno, V.G. (2007), "One size does not fit all, after all: evidence from corporate governance", *Journal of Empirical Legal Studies*, Vol. 4 No. 4, pp. 1041-1057.
- Argyris, C., Putnam, R. and Smith, D.M. (1985), *Action Science, the Jossey-Bass Management Series*, Jossey-Bass, San Francisco, CA.
- Arnold, V., Benford, T.S., Hampton, C. and Sutton, S.G. (2012), "Enterprise risk management as a strategic governance mechanism in B2B-enabled transnational supply chains", *Journal of Information Systems*, Vol. 26 No. 1, pp. 51-76.
- Ashby, W.R. (1956), *An Introduction to Cybernetics*, Chapman and Hall, London.
- Aven, T. (2016), "Risk assessment and risk management: review of recent advances on their foundation", *European Journal of Operational Research*, Vol. 253 No. 1, pp. 1-13.
- Bateson, G. (1972), *Steps to an Ecology of Mind*, University of Chicago Press, Chicago, IL.
- Benford, R.D. and Snow, D.A. (2000), "Framing processes and social movements: an overview and assessment", *Annual Review of Sociology*, Vol. 26 No. 1, pp. 611-639.
- Benner, M.J. and Tripsas, M. (2012), "The influence of prior industry affiliation on framing in nascent industries: the evolution of digital cameras", *Strategic Management Journal*, Vol. 33 No. 3, pp. 277-302.
- Bromiley, P., McShane, M., Nair, A. and Rustambekov, E. (2015), "Enterprise risk management: review, critique, and research directions", *Long Range Planning*, Vol. 48 No. 4, pp. 265-276.
- Burke, K. (1937), *Attitudes towards History*, University of CA Press, Berkeley.
- Carnevale, P.J. (2011), "Dynamics of frame change: the remarkable lightness of frames, and sticky frames", in Donohue, W.A., Kaufman, S. and Rogan, R.G. (Eds), *Framing Matters. Perspectives on Negotiation Research and Practice in Communication*, Lang, New York, NY, pp. 268-276.
- Carroll, A.B. (1999), "Corporate social responsibility: evolution of a definitional construct", *Business and Society*, Vol. 38 No. 3, pp. 268-295.
- Choi, Y. and Lin, Y.-H. (2008), "A content analysis of the newspaper coverage of the three major hurricanes in 2005", *Public Relations Review*, Vol. 34 No. 3, pp. 294-296.
- Chopra, S. and Sodhi, M.S. (2004), "Managing risk to avoid supply-chain breakdown", *MIT Sloan Management Review*, Vol. 46 No. 1, pp. 53-62.
- Comfort, N. and Choudhury, A. (2016), "A broad uproar at deutsche bank", *Bloomberg Businessweek*, No. 4473, pp. 38-39.

-
- Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004), *Enterprise Risk Management - Integrated Framework*, American Institute of Certified Public Accountants, New York, NY.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2017), *Enterprise Risk Management - Integrating with Strategy and Performance*, American Institute of Certified Public Accountants, New York, NY.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2018), *Applying ERM to Environmental, Social and Governance-Related Risks*, American Institute of Certified Public Accountants, New York, NY.
- Cornelissen, J.P. and Werner, M.D. (2014), "Putting framing in perspective: a review of framing and frame analysis across the management and organizational literature", *The Academy of Management Annals*, Vol. 8 No. 1, pp. 181-235.
- de Mailly Nesle, A. (2015), "How is risk management contributing to financial stability? The perspective of a European-GSII", *Journal of Risk Management in Financial Institutions*, Vol. 8 No. 4, pp. 358-364.
- Dewulf, A., Gray, B., Putnam, L., Lewicki, R., Aarts, N., Bouwen, R. and van Woerkum, C. (2009), "Disentangling approaches to framing in conflict and negotiation research: a meta-paradigmatic perspective", *Human Relations*, Vol. 62 No. 2, pp. 155-193.
- Dias, A. (2013), "Market capitalization and value-at-risk", *Journal of Banking and Finance*, Vol. 37 No. 12, pp. 5248-5260.
- Donohue, W.A. (2011), "An interactionist approach to frames", in Donohue, W.A., Kaufman, S. and Rogan, R.G. (Eds), *Framing Matters. Perspectives on Negotiation Research and Practice in Communication*, Lang, New York, NY, pp. 34-50.
- Dunbar, R.L.M., Garud, R. and Raghuram, S. (1996), "A frame for deframing in strategic analysis", *Journal of Management Inquiry*, Vol. 5 No. 1, pp. 23-34.
- Elliott, D. (2001), "Risk governance: is consensus a con?", *Science as Culture*, Vol. 10 No. 2, pp. 165-271.
- Entman, R. (1993), "Framing: toward clarification of a fractured paradigm", *Journal of Communication*, Vol. 43 No. 4, pp. 51-58.
- European Banking Authority (2017), *Guidelines on Internal Governance under Directive 2013/36/EU*, European Banking Authority, Paris.
- European Central Bank (2016), "ECB banking supervision: SSM priorities 2016", available at: www.bankingsupervision.europa.eu/ecb/pub/pdf/publication_supervisory_priorities_2016.en.pdf (accessed 8 January 2019).
- Falkner, E.M. and Heibl, M.R.W. (2015), "Risk management in SMEs: a systematic review of available evidence", *The Journal of Risk Finance*, Vol. 16 No. 2, pp. 122-144.
- Farrell, M. and Gallagher, R. (2015), "The valuation implications of enterprise risk management maturity", *Journal of Risk and Insurance*, Vol. 82 No. 3, pp. 625-657.
- Federal Financial Supervisory Authority (BaFin) (2017), *Minimum Requirements for Risk Management (MaRisk)*, Circular 09/2017 (BA), Bonn/Frankfurt am Main, BaFin, Bonn.
- Field, J.M., Ritzman, L.P., Safizadeh, M.H. and Downing, C.E. (2006), "Uncertainty reduction approaches, uncertainty coping approaches, and process performance in financial services", *Decision Sciences*, Vol. 37 No. 2, pp. 149-175.
- Fligstein, N. (2001), "Social skill and the theory of fields", *Sociological Theory*, Vol. 19 No. 2, pp. 105-125.
- Florin, M.-V. (2013), "IRGC's approach to emerging risks", *Journal of Risk Research*, Vol. 16 Nos 3/4, pp. 315-322.
- Gericke, R.C. (2018), *Corporate Governance and Risk Management in Financial Institutions*, Springer International Publishing, Cham.
- Gibbons, R. and Kaplan, R.S. (2015), "Formal measures in informal management: can a balanced scorecard change a culture?", *American Economic Review*, Vol. 105 No. 5, pp. 447-451.

- Gobo, G. and Molle, A. (2017), *Doing Ethnography*, 2nd ed., SAGE, London; Thousand Oaks, CA; New Delhi.
- Goffman, E. (1974), *Frame Analysis: An Essay on the Organization of Experience*, Penguin, Harmondsworth.
- Gontarek, W. (2016), "Risk governance of financial institutions: the growing importance of risk appetite and culture", *Journal of Risk Management in Financial Institutions*, Vol. 9 No. 2, pp. 120-129.
- Grace, M.F., Leverty, J.T., Phillips, R.D. and Shimpi, P. (2014), "The value of investing in enterprise risk management", *Journal of Risk and Insurance*, Vol. 82 No. 2, pp. 289-316.
- Gray, B., Purdy, J.M. and Ansari, S. (2015), "From interactions to institutions: microprocesses of framing and mechanisms for the structuring of institutional fields", *Academy of Management Review*, Vol. 40 No. 1, pp. 115-143.
- Hardy, C. and Maguire, S. (2016), "Organizing risk: discourse, power, and 'riskification'", *Academy of Management Review*, Vol. 41 No. 1, pp. 80-108.
- Heriart-Dubreuil, G.F. (2001), "Present challenges to risk governance", *Journal of Hazardous Materials*, Vol. 86 Nos 1/3, pp. 245-248.
- Hiebl, M.R.W., Baule, R., Dutzi, A., Stein, V. and Wiedemann, A. (2018), "Guest editorial", *The Journal of Risk Finance*, Vol. 19 No. 4, pp. 318-326.
- International Risk Governance Council (IRGC) (2005), "White paper on risk governance: towards an integrative approach", available at: www.irgc.org/wp-content/uploads/2012/04/IRGC_WP_No_1_Risk_Governance__reprinted_version_3.pdf (accessed 4 December 2018).
- ISO 31000 (2009), *Risk Management - Principles and Guidelines*, ISO, Geneva.
- Jorion, P. (2007), *Value at Risk. The New Benchmark for Managing Financial Risk*, 3rd ed., McGraw-Hill, New York, NY.
- Kahneman, D. and Tversky, A. (1981), "The framing of decisions and the psychology of choice", *Science*, Vol. 211 No. 4481, pp. 453-458.
- Kaplan, S. (2008), "Framing contests: strategy making under uncertainty", *Organization Science*, Vol. 19 No. 5, pp. 729-752.
- Kelly, J.T. (2017), *Framing Democracy. A Behavioral Approach to Democratic Theory*, Princeton University Press, Princeton.
- Kimbrough, R.L. and Componation, P.J. (2009), "The relationship between organizational culture and enterprise risk management", *Engineering Management Journal*, Vol. 21 No. 2, pp. 18-26.
- Kirchler, E., Maciejovsky, B. and Weber, M. (2005), "Framing effects, selective information, and market behavior: an experimental analysis", *Journal of Behavioral Finance*, Vol. 6 No. 2, pp. 90-100.
- Klimt, B. and Yang, Y. (2004), "The enron corpus: a new dataset for email classification research", in Boulicaut, J.-F., Esposito, F., Giannotti, F. and Pedreschi, D. (Eds), *Proceedings of the European Conference on Machine Learning*, Springer, Berlin/Heidelberg, pp. 217-226.
- Klinke, A. and Renn, O. (2012), "Adaptive and integrative governance on risk and uncertainty", *Journal of Risk Research*, Vol. 15 No. 3, pp. 273-292.
- Kramsch, C. (1998), *Language and Culture*, Oxford University Press, Oxford.
- Kuhn, T.S. (1970), *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago.
- Lakoff, G. and Wehling, E. (2016), *Your Brain's Politics. How the Science of Mind Explains the Political Divide*, Societas, Upton Payne.
- Leidner, J.J. and Lenz, H. (2017), "Client's business risk, public-interest entities, and audit fees: the case of German credit institutions", *International Journal of Auditing*, Vol. 21 No. 3, pp. 324-338.

-
- Lewicki, R.J. and Brinsfield, C.T. (2011), "Framing trust: trust as a heuristic", in Donohue, W.A., Kaufman, S. and Rogan, R.G. (Eds), *Framing Matters. Perspectives on Negotiation Research and Practice in Communication*, Lang, New York, NY, pp. 110-135.
- Litrico, J.-B. and David, R.J. (2017), "The evolution of issue interpretation within organizational fields: actor positions, framing trajectories, and field settlement", *Academy of Management Journal*, Vol. 60 No. 3, pp. 986-1015.
- Loebbecke, C. and Picot, A. (2015), "Reflections on societal and business model transformation arising from digitization and big data analytics: a research agenda", *The Journal of Strategic Information Systems*, Vol. 24 No. 3, pp. 149-157.
- Luft, J. and Ingham, H. (1955), *The Johari Window: A Graphic Model for Interpersonal Relations*, University of CA, Los Angeles.
- Lundqvist, S.A. (2015), "Why firms implement risk governance-stepping beyond traditional risk management to enterprise risk management", *Journal of Accounting and Public Policy*, Vol. 34 No. 5, pp. 441-466.
- McWilliams, A. and Siegel, D. (2001), "Corporate social responsibility: a theory of the firm perspective", *Academy of Management Review*, Vol. 26 No. 1, p. 117.
- Mikes, A. (2009), "Risk management and calculative cultures", *Management Accounting Research*, Vol. 20 No. 1, pp. 18-40.
- Mikes, A. (2011), "From counting risk to making risk count: boundary-work in risk management", *Accounting, Organizations and Society*, Vol. 36 Nos 4/5, pp. 226-245.
- Mikes, A. and Kaplan, R.S. (2015), "When one size doesn't fit all: evolving directions in the research and practice of enterprise risk management", *Journal of Applied Corporate Finance*, Vol. 27 No. 1, pp. 37-40.
- Morgan, M.G., Fischhoff, B., Bostrom, A. and Atman, C.J. (2002), *Risk Communication: A Mental Models Approach*, Cambridge University Press, Cambridge.
- Nadkarni, S. and Narayanan, V.K. (2007), "The evolution of collective strategy frames in high- and low-velocity industries", *Organization Science*, Vol. 18 No. 4, pp. 688-710.
- Nutt, P.C. (1998), "Framing strategic decisions", *Organization Science*, Vol. 9 No. 2, pp. 195-216.
- Oliva, F.L. (2016), "A maturity model for enterprise risk management", *International Journal of Production Economics*, Vol. 173 No. 1, pp. 66-79.
- Ojiako, U. (2012), "Examining thematic elements in strategic business risk", *Management Research Review*, Vol. 35 No. 2, pp. 90-105.
- Perri 6 (2005), "What's in a frame? Social organization, risk perception and the sociology of knowledge", *Journal of Risk Research*, Vol. 8 No. 2, pp. 91-118.
- Purdy, J., Ansari, S. and Gray, B. (2017), "Are logics enough? Framing as an alternative tool for understanding institutional meaning making", *Journal of Management Inquiry*, available at: <https://doi/10.1177/1056492617724233>
- Rubino, M. (2018), "A comparison of the main ERM frameworks: how limitations and weaknesses can be overcome implementing IT governance", *International Journal of Business and Management*, Vol. 13 No. 12, pp. 203-214.
- Sassen, R. (2014), "Comparison of risk management regulation from a corporate governance perspective within the German and United States legal areas", *Journal of Governance and Regulation*, Vol. 3 No. 4, pp. 138-148.
- Schön, D.A. and Rein, M. (1994), *Frame Reflection: Toward the Resolution of Intractable Policy Controversies*, Basic Books, New York, NY.
- Scott, W.R. (2003), "Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences", *Industrial and Corporate Change*, Vol. 12 No. 4, pp. 879-894.

- Seo, K. and Dillard, J. (2017), "The persuasive effects of two stylistic elements", *Communication Research*, available at: <https://doi/10.1177/0093650215626979>
- Simona-Iulia, C. (2014), "Comparative study between traditional and enterprise risk management - a theoretical approach", *Annals of the University of Oradea*, Vol. 23 No. 1, pp. 276-282.
- Snow, D.A. and Benford, R.D. (1988), "Ideology, frame resonance and participant mobilization", *International Social Movement Research*, Vol. 1 No. 1, pp. 197-217.
- Snow, D.A., Rochford, E.B., Jr, Worden, S.K. and Benford, R.D. (1986), "Frame alignment processes, micromobilization, and movement participation", *American Sociological Review*, Vol. 51 No. 4, pp. 464-481.
- Stein, V. and Wiedemann, A. (2016), "Risk governance: conceptualization, tasks, and research agenda", *Journal of Business Economics*, Vol. 86 No. 8, pp. 813-836.
- Stein, V. and Wiedemann, A. (2018), "Risk governance: basic rationale and tentative findings from the German banking sector", in Idowu, S.O., Sitnikov, C., Simion, D. and Bocean, C.G. (Eds), *Current Issues in Corporate Social Responsibility: An International Consideration*, Springer International, Cham, pp. 97-110.
- Stein, V., Wiedemann, A. and Wilhelms, J.H. (2018a), "Integrative Risikosteuerungsansätze für KMU: enterprise risk management versus risk governance", *Zfke – Zeitschrift Für Kmu Und Entrepreneurship*, Vol. 66 No. 1, pp. 61-70.
- Stein, V., Wiedemann, A. and Zielinski, M. (2018b), "Einordnung der risk governance in das System der unternehmerischen Überwachung", *Der Betrieb*, Vol. 71 No. 22, pp. 1292-1295.
- Steinberg, M.W. (1998), "Tilting the frame: considerations on collective action framing from a discursive turn", *Theory and Society*, Vol. 27 No. 6, pp. 845-872.
- Strongman, K.T. and Russell, P.N. (1986), "Salience of emotion in recall", *Bulletin of the Psychonomic Society*, Vol. 24 No. 1, pp. 25-27.
- Teece, D.J. (2018), "Business models and dynamic capabilities", *Long Range Planning*, Vol. 51 No. 1, pp. 40-49.
- van Asselt, M.B.A. and Renn, O. (2011), "Risk governance", *Journal of Risk Research*, Vol. 14 No. 4, pp. 431-449.
- Watzlawick, P., Bavelas, J.B. and Jackson, D.D. (1967), *Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies, and Paradoxes*, Norton, New York, NY.
- Werhane, P. (1998), *Moral Imagination and Management Decision-Making*, Oxford University Press, New York, NY.

Corresponding author

Christiane Bouten can be contacted at: christiane.bouten@uni-siegen.de

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com