

Enterprise Risk Management: an Institutional Work Perspective

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Appendix A

Summary of the relevant key insights from existing literature

Studies	Research Design	Study Purpose	Relevant Key Insights
Arena et al. (2010)	Qualitative case study	To contribute to knowledge of ERM and its organisational coupling.	Different risk rationalities create domains for how risk is conceptualised; Different risk rationalities contribute to different structures of intentionality and action.
Bromiley et al. (2015)	Literature review	To answer the questions “What is ERM?” and “How can management research inform ERM theory and practice?”	Leading financial services firms were among the earliest adopters of ERM; Managerial risk-taking must be understood from the perspective that risk [and how it is managed] changes over time; There is a need for a greater understanding of how different individuals and groups within organisations define risk, potential biases in risk assessment, and challenges associated with implementing risk management initiatives.
Caldarelli et al. (2016)	Qualitative longitudinal study	To explore how implementing ERM can assist organisations to pursue both economic and social goals.	Significant pressure has been exerted on financial institutions to improve their risk management systems; ERM is regarded as fundamental to sound corporate governance; A fully embedded ERM system can support dual-purpose organisations in achieving economic, and social value; ERM is not a standard process, it is a context-specific system that needs to be embedded in the organisation’s structures, values, and purpose.
Diab & Metwally (2021)	Qualitative case study	To examine how risk-based governance (RGB) reconfigures the conventional management process into a new mode of risk-based control activities.	Ratings institutions, reinsurance firms, and international regulatory bodies exert considerable pressure on insurance firms to adopt ERM; The implementation of ERM (processes and tools) can become a governmentality tool; New risk technologies are implemented to manage reputational risks and improve firm ratings; Employee perceptions of risk change as a result of training and the hiring of new risk managers with relevant academic experience to institutionalise the new risk culture in the “minds” of employees.
Giovannoni et al. (2016)	Qualitative longitudinal case study	To explore how different actors deal with risks inside organisations, especially actors with the same functional tasks during risk management change.	“Legitimacy-driven styles” of risk management prevent organisations from fully embedding risk information into decision-making; Role-based precipitating dynamics allows for a shift from narrow risk-return metrics to holistic conceptions of strategic risk; Risk managers realise that they can shape the power dynamics between themselves and others (e.g., management accountants) by mobilising technical and management capabilities to claim space in strategic decision-making and thus enabling risk management change.

Hall et al. (2015)	Qualitative longitudinal case study	To examine how risk managers develop interpersonal connections with decision-makers and how they engage in toolmaking.	The interactions between risk tools and experts can give risk managers credibility in decision-making; Experts in toolmaking take on two roles: compliance experts—who have limited influence on decision-making, and engaged toolmakers—who create tools to effectively communicate their knowledge with others.
Jabbour & Abdel-Kader (2015)	Qualitative case study	To study changes in capital allocation routines following the introduction of a new risk management system, enterprise risk management (ERM).	ERM can act as an institutional force for change via the institutionalisation of new routines; New risk management institutions establish different meanings, norms, values, and powers for different actors. In addition, the roles and responsibilities of actors across the organisation changed as a result of allocating risk responsibilities to them.
Jean-Jules & Vicente (2020)	Conceptual study	To develop a theoretical framework that identifies social and technical factors that are critical to achieving successful ERM implementation from the perspective of ERM as a complex process of innovation.	The implementation of ERM significantly expands the range of skills that agents involved in risk management must be proficient in; ERM implementation requires risk managers to collaborate with other functional units, giving them access to their information and knowledge; ERM implementation requires considerable behavioural change, training, and learning; Adjustments to the work system, i.e., structure and work practices, are insufficient, as attitudes and behaviours also need to change.
Jordan et al. (2013)	Qualitative case study	To contribute to understandings of risk management technologies by investigating risk map use in an inter-organisational project.	Risk technologies facilitate coordination amongst distributed actors, by enhancing dialogue; Risk technologies also increase participant trust in decision-making processes, however, they were not valued for their accuracy in assessing risks.
Jørgensen & Jordan (2016)	Qualitative case study	To study the everyday riskwork involved in practices of constructing, drawing upon and revising risk maps.	Riskwork is not characterised by straightforward practices that are coherent, rather, it involves struggles to reconcile different rationalities, e.g., producing reassurance, reporting efficiency, critical reflection, accountability, and a cautious imagination of critical futures.
Meidell & Kaarbøe (2017)	Qualitative case study	To study the transformation of the ERM functions influence in decision-making over time.	The evolution of risk technologies affects the risk functions capacity to influence decision-making, however new technologies cannot achieve this on their own, it also necessitates selling new ideas and transferring knowledge over boundaries.
Mikes (2008)	Qualitative case study	To assess the roles that risk functions and, senior risk officers in particular, play in fifteen large international banks.	CROs and the risk function can take on the role of ‘compliance champion’ or ‘business partner’; Strategically involved CROs interpret the business partnering role in two main ways: (1) where the risk function acts as a <i>strategic advisor</i> to the business or (2) as a <i>strategic controller</i> . Strategic advisors strive to be an influential voice in key business decisions, while strategic controllers pursue the formal integration of risk management with performance management.

Mikes (2009)	Qualitative case study	To explore how ERM achieves organisational significance.	The study identifies alternative models of ERM that reflect different calculative cultures and have implications for how risk technologies are used and to what extent those working in the risk function engage with others as risk numbers are mobilised in the process of negotiating intra-group capital allocations.
Mikes (2011)	Qualitative longitudinal case study	To understand how organisations displaying a particular calculative culture become so committed to risk measurement while others do not.	Regulatory imperatives as a driver of coercive isomorphism should not be underestimated; The culture of quantitative enthusiasm is shared by the majority of external evaluators, including regulators, however the risk functions influence did not extend to strategic decision-making; The culture of risk envisionment is evident in the role that those working in the risk function and the CRO take, i.e., strategic advisor, where their mode of investigation and questioning of other professionals is interactive, and where risk officers position themselves as self-reflecting and self-improving organisational actors.
Mikes (2016) (Book chapter)	Qualitative case study	To answer the question: how do senior risk officers strike a balance between the roles of 'compliance champion' and business partner?	Risk tools (utilised properly) can democratise risk management in organisations by involving employees with different backgrounds and areas of expertise in risk talk; ERMs channelling of information both vertically and horizontally throughout the organisation enables executives and employees to develop a shared understanding of the risks and potential solutions; Risk management is continually evolving and is thus never complete; When CROs enable the facilitation of risk talk, the real work of risk management occurs in the business lines; The challenges for risk managers in becoming influential are securing the commitment of others, constructing an informal network of relations, shaping the perception of their role, and resisting stereotypes.
Mikes & Kaplan (2015)	Conceptual paper	To develop a more comprehensive specification of ERM (than what is currently available in the literature) and identify the parameters that could serve as a solid foundation for a contingency theory of ERM design and implementation.	There is significant variation in companies' risk management processes; The risk management function can take on different 'approaches' and 'roles' such as an independent overseer role focusing on compliance and internal control or a business partner; In a dual or hybrid role the risk function balances compliance with a business orientation by deploying separate groups of independent and embedded risk managers.
Pagach & Warr (2011)	Quantitative case study	To examine the characteristics of firms that choose to adopt ERM by using various proxies for the factors that are hypothesised to drive ERM adoption.	ERM enables managers to evaluate the firm's total risk exposure and engage in a holistic and unified risk management strategy that can create value by considering the interactions of individuals; ERM is more prevalent amongst depository institutions, brokers, and insurance firms.
Palermo (2016)	Qualitative case study	The aim is to provide an empirical account of riskwork within the	Prior literature has explored the changing role of the risk manager in organisations. Risk managers can be technical experts of a sub-discipline of risk management or in holistic risk management (ERM)

(Book chapter)		safety department of a large airline company	be viewed as change facilitators or business partners; Relational skills, rather than technical skills and abstract risk management knowledge are most important for the role of risk manager.
Power (2009)	Conceptual paper	The aim is to challenge the core elements of ERM and suggest that an impoverished conception of risk appetite is part of the intellectual failure at the heart of the financial crisis.	The legitimacy-driven style of risk management has become extensively institutionalised and globalised; Risk management has operated as a boundary preserving model subject to the logic of audit trails rather than a boundary challenging practice that confronts the complex realities of interconnectedness; The need to embed risk management within business processes is an unquestioned imperative of ERM but there is very little elaboration of what embedding involves in research; The current conception of risk appetite has focused mainly on capital rather than human behaviour which is a significant source of intellectual failure within the ERM model; There is a risk that ERM may be framed by the wrong experts pursuing the wrong kind of embeddedness.
Power et al. (2013)	Qualitative case study	To discover and analyse how the risk culture change agenda was taking shape inside different organisations in several banks and insurers in the UK.	Organisations must decide how to strike a balance between the integrity of the three lines of defence model, which defends the structure and independence of the risk management function, and the pragmatic modification of the model so that risk capabilities can be embedded into the business units.
Wahlström (2009)	Qualitative case study	To investigate the perceptions of Basel II (Basel Accords) amongst Swedish bankers.	The introduction of new ERM tools can lead to tensions between risk managers and other professionals working in the business lines; While risk measurement is deemed useful by bank staff working with measurement methodologies, its usefulness is questioned by staff working in operations; Different groups, i.e., risk experts and other professionals, have different frames of reference that influence how they evaluate changes as being in accordance with their own perspective (viewpoint) or not.
Woods (2009)	Qualitative case study	To record and understand the control structure used to manage risks and to identify factors that influence the selection and operation of the risk management system	Regulators view risk management as an integral part of the corporate governance process; Central government policy influences the design and operation of the risk management system, including performance appraisal and knowledge sharing; Information and communication technology is integral to the risk management process, i.e., for real-time updating of risk registers, training, and sharing of risk information; Organisational size affects the formality of the risk management system and the number of specialists involved and the level of sophistication of the technologies they use.