BECOMING COMFORTABLE WITH SAYING YES

A STUDY ON RISK MANAGEMENT AND DECISION-MAKING IN A STATE PENSION FUND

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Abstract

Risk management has in recent decades shifted from a concern for financial risk to including a plethora of risks that can adversely affect an organization. One of the categories of risk that has risen in relevance is operational risk, a category many organizations struggle to make sense of, not least due to its qualitative nature. However, the in-depth understanding of the management of operational risk is limited. This thesis therefore studies a state pension fund's practice for managing operational risks associated with private market investments. Operational risks are tangible in these investments due to the pension fund's reliance on external management. We draw on theoretical concepts of comfort theory to explain how the risk practice aims to create organizational comfort around complex decisions. What proved to be central in the activities of the risk practice are the social interactions between internal subject experts and decision-makers to discuss, challenge, and validate held perceptions. We conclude that the operational risk practice is characterized by a search for organizational comfort, which is found by conducting the risk assessment as a collaborative effort. The horizontal and vertical transfer of comfort amongst the actors involved in the practice is what ultimately support decision-making. In contrast to previous research, our study demonstrates how a risk practice can be integrated, credible, and influential also without relying on dedicated risk experts and technical risk management tools.

Keywords:

Risk management, Operational risk, Decision-making, Comfort theory, Private market investments

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Table of Contents

1. Introduction

Making decisions is hard. It's especially hard when a decision means a long-term commitment that is difficult to reverse and relies on someone else. In the world of alternative investments – this is the norm. These investments, which focus on asset classes that fall outside the traditional classes of public equity and bonds, rely on relationships that are unique in the world of business. To understand these relationships, one could think of them as a "marriage", as they were commonly described to us. For this study's case organization, finding new partners and managing existing marriages is a core part of its business. The organization, a state pension fund, has recently increased its reliance on these types of investments to ensure the financial well-being of current and future pensioners. Although no investor wants to find out that it has married the wrong partner, for a state pension that represents its country, this would mean a fall from a great height. Therefore, the fear of ending up in bad company may make the decision to say "no" the easiest choice. But what happens if the fund avoids getting married to anyone in fear of what could happen in the future? Taking the easy way out means trading off long-term success for short-term comfort. In a way, it is a two-folded challenge: how do you make sure that you commit to the right company, and how do you make sure that you evaluate what the "right company" is in an efficient way? After all, all decisions require a leap of faith. So, how do you get comfortable with the risk of making the wrong decision?

It is a common fact that most situations are associated with a certain level of risk-taking or risk exposure, but the concept of proactively managing risks has grown over the last two decades. Risk management began with a narrow focus on financial risk but is now centered around an enterprise-wide approach, where virtually all risks an organization is exposed to are considered (Power, 2004; Arena et al. 2010; Soin & Collier, 2013). This development has been driven by various business scandals during the 1990s, such as the Enron scandal (Arena et al., 2010), and not least the financial crisis in 2008 (Palermo et al., 2017). A type of risk that has received increased attention through this change is *operational risk* (Mikes, 2007), defined by the Basel Committee as "direct or indirect losses resulting from inadequate or failed internal processes, people and systems or from external events" (BIS, 2003).

> The story of operational risk characterizes a new risk management in which the imperative is to make visible and manageable essentially unknowable and incalculable risks – Power (2004, p.30)

As highlighted by Power (2004), operational risks are complicated. By and large, managing your operational risks is making sure that your house and the people living in it is in order. Making sense of what that means, and how it should be adopted have proven to be a challenge for organizations in the financial sector (Mikes, 2007). These organizations are often skilled in managing quantitative risk, such as credit and market

risk, but less experienced when it comes to "softer" risk categories which oftentimes require qualitative assessments (Mikes, 2007). Apart from looking after their own house, organizations also need to consider the operational risks of organizations it has business-related commitments with, as with the assessment of the counterparty before getting "married" through an investment in private markets. However, even though the literature of risk management is becoming more substantial, in depth understanding of the assessment and management of operational risks is lacking. What systems, processes, and roles are critical for assessing operational risks? How are these practices influencing managerial work? And how does it support decision-making? The increasing significance of these questions for organizations warrants a further understanding of the area. To shed light on the complexities surrounding operational risks, this study aims to answer the following question: *How is an operational risk practice constructed and what role does it have in decision-making?*

We answer this question by conducting a single-case study of a state pension fund's practice for managing operational risk associated with private market investments. The pension fund, which we have given the alias PensionCap, has in recent years increased its investments in private markets. This increased activity has led PensionCap to formalize their routines for assessing and managing operational risks. We have studied PensionCap's risk practice primarily through conducting interviews with an array of actors that are either directly or indirectly involved in the practice. Through this method, we not only got to delve into the inner workings of a risk practice, but we also got to study a type of organization which has received limited attention in risk literature – public institutions. We draw on comfort theory (Pentland, 1993; Pezeu-Massabuau, 2012; Gendron et al., 2021) to explain how actors in an operational risk practice engage in formal and informal activities to achieve a level of organizational comfort that enable decision-making. By using theoretical concepts of comfort theory, we apply a perspective that has rarely been used in the risk management literature. In addition, this study contributes to the risk literature by illuminating both an empirical setting - public institutions - and a type of operational risks - a counterparty's operational risks - which to our knowledge have not yet been studied. We argue that this study and its findings are of interest for organizations that are exposed to the operational risks of organizations with which it has business-related commitments. As such, organizations that make similar investments as PensionCap or those that make a long-term commitment in either direction of the value chain might find this study especially interesting. However, we argue that this study contributes to the field of risk literature as a whole, as it provides an alternative perspective of risk management as a dynamic search for comfort.

This paper is dived into six sections, including this introduction. In the second section, we will delve into the conceptual background of our study and present previous literature within risk management, specific concepts of comfort theory, and the developed theoretical framework of this study. In the third section, we will motivate the research

methodology for answering our research question including which, and how, data was collected and analyzed. In the empirical analysis, we will present the background and context of the case organization and the empirical findings of this study. In the fifth section, we will discuss the empirical findings in light of our theoretical framework. In the sixth and final section, we will conclude by presenting our contribution from this study and provide ideas for areas of further research.

2. Conceptual background

Previous research on risk management forms the basis for our understanding of known risk management issues, which is also the knowledge we seek to build upon and deepen. This research, centering around factors influencing the construction of risk practices and implications on its usage, is described in section 2.1. The main tool for performing our analysis of the case organization's risk practice is the concept of (dis)comfort. We outline the core of comfort theory, with a focus on a few relevant concepts, in section 2.2. Lastly, in section 2.3 we integrate previous literature and the concepts in comfort theory and describe how we aim to use these to answer the research question of this study.

2.1. The rise of risk management of everything

In this section we review previous research made in the field of risk management, including the emergence of risk management and the observed challenges with fulfilling the various purposes of risk management. The quite extensive risk management research with contingency theory as the theoretical angle concludes that an organizations' context impacts the construction of a risk practice. However, it is not only the external characteristics that influence the construction of a risk practice, but also risk managers' attitude towards the measurability and manageability of risk. We therefore conclude the review of previous research by delving into the concept of *calculative cultures* and how it impacts not only risk management in general, but operational risk management specifically.

2.1.1. The growth of risk management in practice and research: an overview

The concept of risk is not new for actors in the financial industry. Financial risk management as a subject is rooted in Markowitz's (1952) portfolio theory, where he showed, amongst other things, that the risk exposure could be optimized through effective portfolio diversification. Initially, the focus on financial risk and the methods for risk measurement came to dominate the approach to risk management (Kaplan & Mikes, 2016). However, driven by several business scandals in the 1990, such as the Enron scandal, policymakers issued new codes and regulations suggesting that risk management should be an integral part of organizations' control systems and build on a definition of risks that goes beyond financial risks (Arena et al., 2010). Additionally, the financial crisis in 2008 exposed weaknesses and insufficiencies especially in the risk management systems of banks and other financial institutions, supporting the view that financial companies also ought to consider non-financial risks and go beyond the quantitative approach to risk management (Power, 2009; Soin & Collier, 2013; Palermo et al., 2017). Kaplan & Mikes (2016) emphasize how the quantitative financial risk models failed during the financial crisis. They argue that this led to a loss of confidence in the statistical

models, indicating that risk management is more of an art than science. As a result, risk management began to focus more on strategic and operational issues (Mikes, 2007; Arena et al., 2010). However, Power (2004, 2007, 2009) is among one of those who expressed criticism towards the shift to enterprise-wide risk management, or what he calls "the risk management of everything." He argues that the requirements on risk management posed by regulators and other policy setters imposed a form of control that is based on an oversimplified version of organizations' reality. As the enterprise-wide approach becomes too concerned with managing *all* risks, it may fail to identify and focus on the risks that are truly business-critical. As such, the risk management of everything could end up as "the risk management of nothing" (Power, 2009). Nevertheless, an enterprise-wide approach to risk management saw a broad adoption amongst actors in the financial industry (Arena et al., 2010), not least due to formal requirements such as Basel II requiring banks to consider also operational risks in addition to market and credit risk in their capital requirement calculations (BIS, 2003). As such, financial institutions began to include operational risks in their risk management systems (Mikes, 2007), defined by the Basel Committee as the "direct or indirect losses resulting from inadequate or failed internal processes, people and systems or from external events" (BIS, 2003).

In parallel to the growth of risk management amongst practitioners, the interest in the field amongst researchers increased. A substantial part of the risk management researchers has tried to bring clarity to the role an organization's context has on its risk management system. It has been found that the design of a risk management system is shaped by the context it is intended to be used within (Chenhall, 2003; Woods, 2009; Gordon et al., 2009). In addition, Arena et al. (2010) argue that risk management is not a standardized process, but rather contingent on various firm characteristics. Other researchers try to understand the implications of the enterprise-wide view of risk management. For example, Caldarelli et al. (2016) study a dual-purpose cooperative bank and uncover that an enterprise-wide approach to risk management strengthens the bank's ability to achieve both its economic and social purpose. They argue that banks can go beyond managing risks with the purpose of maximizing financial return by using their risk systems to consider and avoid the risk that could hinder other types of purposes, such as social impact objectives. Related to this, Palermo et al. (2017) concluded that the closer attention to "risk culture" among banks after the financial crisis indicated a pressure to redefine the fundamental ends of financial institutions, which have a broadening effect on their means, and in turn their risk management.

Arena et al. (2011) found that enterprise-wide risk management is used with the purposes to assist managers in decision-making, to strengthen internal control and compliance, and to support internal audits. An efficient, useful, and "good" risk management system should thus work to support these purposes. But creating a good risk management system is no small feat. Both Power (2009) and Arena et al. (2011) highlight several of the challenges that organizations face in making their risk management strategically relevant

and operationally useful. Power (2009) argue that the often-adopted rule-based risk management, characterized by box-checking methods for controlling risk and an all too independent risk function, most likely will become uncoupled from the front-end organization. Not only would a system like that insufficiently capture the key areas where the organization is taking risks, but it would also give a false sense of control to senior managers (Power, 2009). Arena et al. (2011) highlight the necessity of developing risk management tools and methods that integrates and activates risk specialists on different hierarchical levels, which is something that many organizations, not least non-financial, struggle with.

So, what is needed to create a risk management system that can be used for strategic purposes? By studying the implementation of a risk management system in three non-financial organizations, Arena et al. (2010) conclude that greater social interaction around and within a risk management system leads to a more proactive and useful system, with a closer connection to operations. Additionally, Kaplan & Mikes (2016) emphasize the importance of having discussions and interactive meetings as complements to quantitative risk models for the risk management system to be useful for decision-making and an aid in strategic objectives. Even though they argue that the sole use of quantitative risk management models lost its perceived validity during the financial crisis in 2008, they argue for how value-at-risk calculations, sensitivity analyses, risk maps, and scenario planning still can be important components of a risk management system. The models can effectively be used to direct attention and trigger discussions, which in turn can support strategic and constructive decision-making. Finally, Kaplan & Mikes (2016) argue that organizations most efficiently avoid the fallacy of a too independent and compliance-oriented risk management system, raised by Power (2009) by having the risk function deploy both compliance- and business-focused groups of risk managers.

Turning further to how risk management connect to decision-making, Hall et al. (2015) and Meidall & Kaarbøe (2017) study how risk managers influence and impact managerial decision-making. Hall et al. (2015) conclude that *toolmaking,* which implies the adoption and adjusting of tools that embody their expertise, is crucial for gaining influence. Building on that, Meidall & Kaarbøe (2017) conclude that risk managers engage in *sensegiving* by influencing others both horizontally and vertically to implement new risk practices and increase the use of these. Even though they have slightly different angles in their conclusions, technical versus social, a common finding in these studies is that risk experts use tools to influence managers and their decision-making - tools which commonly are based on quantification of risk. Jordan et al. (2013, 2018) contributes to the view that specific risk management tools can be used as mediating instruments that connects different parts of the organization and thereby integrate the risk practice in the operations. Contrary to Hall et al. (2015) and Meidall & Kaarbøe (2017), Jordan et al. (2013, 2018) focus on the potential of using risk maps as a tool to create a platform for conversation and engagement around risks. The above studies furthermore exemplify the

central role that risk experts and technical tools have gained in the accumulated research on the use and implication of risk management.

However, the research on risk management also provides alternative views to explain the dynamics of a risk practice. For example, Tekathen & Dechow (2013) argue that an enterprise-wide risk system is not always successful in reducing uncertainty, even though it might be the intention. Rather, it can increase the organization's interaction with uncertainty, create circulation, and movement which promotes a quest for accountability. In addition, Gendron et al. (2021) argues that risk management practices profoundly are affected by the tensions between activities that inflict discomfort and activities that provide comfort. The authors, whose objective was to understand how corporate board members make use of risk management, conclude that the most efforts are laid on the activities that produce comfort. In this setting, activities of discomfort include exposing and identifying the risks of the organization, while activities of comfort include categorizing and mitigating those risks.

2.1.2. Calculative cultures and the management of operational risks

In several studies, Anette Mikes studies how the preferences and personal convictions of managers impact the choice of balance between quantitative and qualitative methods for managing risks. By showing that systematic variations in risk management exist in the financial industry, Mikes (2009) draw attention to what she calls *calculative cultures.* She shows that two similar banks' vastly different approaches to risk management were due to managers' perceptions about the potential of quantitative risk models. She argued that the two studied banks each represented one of the two categories of calculative cultures. One of the banks emphasized managing risks by the numbers and relied heavily on risk quantification – *calculative idealism* – whereas the other bank managed risks holistically and focused on complementing risk quantification with qualitative judgment – *calculative pragmatism*. Mikes (2011) argues that organizations with a culture of qualitative idealism are dedicated to risk measurements, and organizations with a culture of quantitative pragmatism take a different path and focus instead on risk envisionment. Risk envisionment entails the strive to present top management with alternative future scenarios and with expert opinion on emerging risk issues.

The literature on operational risk management is limited, but one of the in-depth studies is made by Mikes (2007). In this study, Mikes examine how three, from a distance similar, financial institutions manage operational risk. She studies how managers select among available methodologies and tackle their inherent deficiencies for managing precisely operational risks. Mikes (2007) argues that operational risk is controversial because of the difficulties of performing measurement and control. Meanwhile, it can be defined in various ways, even though many lean towards the Basel Committee's guidance on the definition of operational risk. Operational risk has earlier been labeled by banks as "residual risk", or the risks that remain after accounting for credit and market risk. As

such, there is room and flexibility to define and manage operational risks in various ways. Mikes (2007) explains how operational risk practices need to account for three issues simultaneously: (1) Low-frequency events with high impact (e.g., a large trading loss due to insufficient internal control), (2) relatively frequent events with limited impact (e.g., minor compliance breaches), and (3) determine an appropriate amount of capital to allocate for operational risks. It turns out that the three case companies of Mikes' study approach the first and second issues in similar manners, but the third issue can be solved both through statistical modeling and through judgment and institutionalized rules of thumb.

Mikes (2007) identify two spectrums in which banks choose between to construct their operational risk practice. The practice can be structured top-down or bottom-up, and it can either be model-based or process-based. The top-down approach begins with an assessment of risks at the firm level, which is then assigned to lower levels of management. This approach is common for low probability, high impact types of risk, and normally requires a central risk management team that assess the risks of other business units and influence capital allocation. The bottom-up approach instead begins with lower-level management assessing the individual business unit risk, which is then aggregated for the whole firm. A model-based risk practice uses statistical models to calculate the monetary impact of various risks and allocate the appropriate capital. A process-based risk practice considers the causes and consequences of operational risks based on qualitative information and makes risk assessments based on judgments. Two of the three banks that Mikes (2007) studied turned out to have process-based risk practices, while the third had deployed a model-based risk practice. Furthermore, the studied process-based risk practices centered around using risk maps to make qualitative assessments. Central was also to perform risk reviews where lessons from materialized operational risks were discussed and learned. Mikes (2007) highlight various conventions in operational risk practices, called conventions because of them gradually being taken for granted and becoming "standard practice". These conventions, for banks, are: (1) a flexible definition of operational risk, (2) methodological pluralism, (3) the advanced measurement approach (AMA) as a carrier of efficiency and reputational gains, (4) the desirability of an independent risk management function, and (5) the desirability of embedding operational risk management in the business processes.

As with her later studies (i.e., 2009, 2011), Mikes (2007) concludes that organization's practice for managing operational risk is largely shaped by its calculative culture. However, she also claims that practices are influenced by the institutional environment, rules, and myths which oftentimes are rooted in senior risk managers' previous professional experiences. The calculative cultures are also shaped by risk managers' philosophies about the manageability and quantifiability of operational risks. Finally, she concludes that for banks specifically, in which risk management is largely driven by regulations, there is a cost and benefit of being compliant and an imminent threat of

deadweight costs of compliance. However, the study indicates that indirect benefits such as reputational gains can balance those costs, bringing stability and legitimacy to organizations. Finally, Mikes (2007) concludes that the case companies demonstrate how some of the conventions and enforced methods of operational risk management seem to provide limited functional efficiency. She argues that some activities almost become ceremonial, and formal structures provided reputational gains rather than operational efficiency gains.

2.2. Comfort theory: the concept of (dis)comfort

The theory of comfort builds on humans' physical and psychological need for comfort and the theory seeks to explain how actors engage in various activities in their strive toward reaching comfort (Kolcaba & Kolcaba, 1991). Comfort theory originates from the research area of nursing and hospital care, formulated by Kolcaba & Kolcaba (1991) in their analysis of the concept of comfort in which they clarify the semantics of comfort and its use in nursing practice and theory. They describe how nursing has a heritage of being centered around comfort, with comfort as the ultimate goal for nursing and care. The concept has also been applied in some empirical settings relating to accounting. Sarens et al. (2009) sought to explain how internal audit functions provide comfort to the audit committee. Kewell & Linsley (2017) used comfort theory to explain how the human property of reassurance within risk assessment will change as machines are given command over work traditionally performed by accountants. Gendron et al. (2021) studied how board members oversee risk management by inflicting tensions of comfort and discomfort.

Since the concept of comfort has been applied also in business settings, it becomes clear that the behavior of striving towards comfort also can explain interactions in a context where comfort is a mean rather than an end. Therefore, we intend to utilize this concept to analyze if and how comfort can be an enabling mean to achieve financial and organizational goals. A concept in comfort theory that is exemplified by for instance Kolcaba & Kolcaba (1991), Sarens et al. (2009), and Gendron et al. (2021), is the distinction between the separate groups of *comfort givers* and *comfort seekers* – with the nurse and the patient, the internal audit function and the audit committee, and the board member and the risk consultant. In essence, one group assumes, or in some cases is appointed, the role of comfort giver due to their specialized expertise and experience within a topic, while the comfort seekers are in the position where they need to trust the assurance provided by the comfort givers. As stated by Gendron et al. (2021), comfort givers continuously develop tools, technologies, and rules to enhance their legitimacy and gain trust with the comfort seeker, and to provide comfort. Meanwhile, the comfort seeker evaluates the credibility of what is provided by the comfort giver, oftentimes to support and enable their decision-making.

Related to the notion of transferring comfort, Pentland (1993) posed the following question: how would it feel to own stock in a corporation whose financial statement was not audited? This rhetorical question is used by Pentland (1993) to highlight the role of auditors in providing legitimacy and comfort to organizations' external reporting. He seeks to understand how the audit ritual transform corporate managers' financial statement into trustworthy information that the auditors, the client organization, and the public can rely upon and feel comfortable with. Pentland (1993) embodies the concept of comfort givers and seekers with auditors as comfort givers and the client organization and the public as comfort seekers. However, his study goes further in-depth into *how* the incorporated rituals, or interactions, of auditing provide comfort both within and between involved parties. In Pentland's (1993) setting, different groups of roles pose as both comfort seekers and givers and the transfer of comfort between these eventually result in a macro-level comfort for audited financial statements. He highlights how interactions, even though called rituals, not are to be seen as irrational. Rather, a ritual is an activity aiming to create an effect of social order. Pentland (1993) draws on Collins' (1981, 1987) argument of how *emotional* processes, rather than rational calculations, are what can lead to social order. Furthermore, the audit ritual is characterized by explicit purposes and statements, as well as implicit statements and social relationships between the auditors and the client organization.

The core output of auditors' work is their explicitly and implicitly communicated judgment of the financial statements. Pentland (1993) concludes that auditors not only need to reach a cognitive state, but also an emotional state to feel comfortable with the auditing. A significant contributing factor in this proved to be the gut feeling that auditors gain in the ritual of auditing which appears to steer both the planning of the audit and judgments made in the audit. The gut feeling also enabled auditors to reach conclusions, even in situations of uncertainty. Accordingly, the ritual and process of auditing in itself produce comfort. Pentland (1993) further recognizes how this comfort is transferred between people and groups within and outside the audit firm, something he conceptualizes as *comfort as a commodity*. For instance, senior partners gain their comfort by questioning and relying on the comfort of a middle manager. As comfort travels upwards in the organization, it goes from being an individual's emotional feeling to becoming an institutional fact. Hence, if enough people are comfortable with the state of something, it becomes "true". However, for these rituals to be effective, it must be performed or overseen by the right people, "right" being people who have been entrusted to make these challenging and qualitative judgments, and which senior managers have confidence in.

In a more philosophical approach and with a greater focus on discomfort, Pezeu-Massabuau (2012) contributes with his perspective on how comfort and discomfort can be viewed as operating in conjunction with each other. A practice evolving around (dis)comfort, such as risk management, can then be viewed as an ongoing tension between

resolving discomfort and searching for comfort. He further separates and conceptualizes how (dis)comfort can be seen both as a *state* and as an *action*, where the former refers to the feeling of comfort that one can immerse oneself in. This is generally a situation of stability in which one is feeling reassured. Comfort as an action is then the strive towards reaching the state of comfort, which are actions that actively decrease the level of discomfort one is inflicted with. Discomfort as an action may be driven either by a sense of obligation or a willingness to endure discomfort to reach the feeling of doing "the right thing". Hence, the pressure of acting in discomfort may either be external or internal.

Article	Empirical setting	Relevant concept
• **Kolcaba & Kolcaba (1991)** • **Sarens et al. (2009)** • **Gendron et al. (2021)**	• Nursing, with a nurse providing comfort to the patient • Auditing, with internal audit providing comfort to the audit committee • Risk management, with risk consultants providing comfort to board members	Comfort seekers and comfort givers
Pentland (1991)	The audit ritual, through micro-interactions providing order and comfort at the macro-level	Comfort as a commodity
Pezeu-Massabuau (2012)	Philosophical theory of discomfort and comfort, and how they relate to each other	(Dis)comfort as a state and as an action

Table 1. Summary of relevant concepts within Comfort theory

The emergence of risk management as a common practice and important topic within an organization indicates a widespread view of being in a state of discomfort when uncertainties and potential risk exposure are unexplored (Kewell & Linsley, 2017). Risk management, including activities that alternate between inflicting discomfort and seeking comfort (Gendron et al., 2021), can then be seen as a process for comfort creation for the organization's internal and external stakeholders. As with life in general, the future is highly characterized by uncertainty, and as such, a level of certain risk exposure is inherently unavoidable. But as with the auditing process in Pentland's (1993) study, the process of risk management could potentially be a creator of social order and an enabler of comfort for everyone that are affected and dependent on the outcome of the risk management. For those that are directly involved in the risk management, the processes, practices, and systems used could be seen as tools for aiming toward what Pezeu-Massabuau (2012) refers to as the state of comfort. This means that risk management supposedly can produce comfort which can be transferred *as a commodity,* by it being a continuous strive towards the state of comfort and a balancing act between comfort and discomfort. This study aims to make use of these theoretical concepts of comfort theory to analyze how risk management, specifically operational risk management, works in practice.

2.3. Theoretical framework: risk management and comfort

This study aims to understand what can explain the construction of an operational risk practice, and how it facilitates decision-making. In addition, it aims to answer the call of Gendron et al. (2021) by increasing the understanding of comfort dynamics by applying it in a new empirical setting. As continuously stated, operational risk differs from other categories of risks, such as market or credit risk, not only in terms of quantifiability but also in perceived manageability (Mikes, 2007). With the concept of calculative cultures, Mikes (2007) tries to explain why three financial institutions' approaches to operational risk management differ. She argues that calculative cultures can broadly be divided into two categories, *calculative idealism*, and *calculative pragmatism*, which influence the choice and usage of different risk management systems (Mikes, 2007, 2009, 2011). The differences between these two attitudes lie in whether managers perceive risk calculations to be reflective of the reality, and to what extent quantitative models can adequately capture risks. The calculative idealist prefers quantitative methods and regard outputs of models as an economic representation of risk, and the calculative pragmatist view models as solely providing a direction of attention which needs to be complemented with judgment and intuition to be useful as a tool for control.

However, the information that is used for decision-making becomes much more subjective when a risk practice is shaped by calculative pragmatism, and where qualitative judgments become a leading determinator (Kaplan & Mikes, 2016). We argue that organizational and communicational challenges ought to arise with a preference for qualitative methods, both in terms of resource efficiency and resource allocation, formulation and sharing of assessments, and how guidance in strategic issues is provided. Furthermore, the different calculative attitudes may not only be an indication of the perception of the power of numbers, but also a difference in the perception of people's ability to make rational and useful assessments. Moreover, in the calculative pragmatism that Mikes (2007, 2009, 2011) explains, the quantitative risk model is still viewed as the base for risk management. This might apply to the banks that are studied in her research but is probably not as applicable to non-financial organizations, which supposedly have other intentions with their risk management. Even though Mikes (2011) expands the concept of calculative cultures with the finding that risk managers in calculative pragmatism make use of scenarios and alternative futures to communicate and influence operational managers, questions remain about how people involved in risk management overcome the challenges of qualitatively based methods. Therefore, we aim to complement the explanation of calculative cultures with the concept of (dis)comfort. Aside from Kewell & Linsley (2017) and Gendron et al. (2021), the concept of comfort has rarely been used as a theoretical framework to make sense of risk management. However, we see potential in utilizing the concept of (dis)comfort in explaining how process-based risk practices are constructed to provide managers support in strategic issues and decision-making.

There is another aspect of Mikes' (2007, 2009, 2011) settings with banks that limits the applicability of her conclusions to our empirical setting. The studied banks have continuous oversight of operational risks and focus on small-impact decision-making, which is different from the low-frequency high impact decision-making that characterizes the process of a private market's investments. This places greater weight on each individual decision in the pension fund. In the meantime, the organizations in state pension funds are generally in terms of headcount smaller compared to a bank's organization. This means there is more capital per employee, leading to a higher dependence on the capability of each professional and for the individual a more tangible feeling of accountability. Consequently, this creates a unique and, so far, unstudied, environment that combines the complexities of significant decision-making and commitments with being dependent on the judgement and assessment of a few individuals. It is furthermore our belief that the search for comfort becomes much more critical in such an environment.

We intend to apply comfort theory from an organizational and structural perspective, where the groups of comfort givers and seekers are less clear. We therefore aim to focus on how the *structure* of processes can provide comfort to the involved parties as well as enable the acts of discomfort that are necessary for decision-making. Thus, our analysis will have similarities with the study of Pentland (1993), with a focus on a process that involves various parties on different operational and managerial levels who engage in acts of comfort and discomfort. We aim to understand the construction of PensionCap's risk practice with the support of Mikes' (2007) operational risk maze, considering the issues and conventions of operational risks with the spectrums of a top-down versus a bottom-up approach and a method- versus a process-based practice. By using the concepts of (1) comfort givers and seekers, (2) comfort as a commodity, and (3) (dis)comfort as a state versus an action, we aim to explain the role of the risk practice's social and technical components in enabling both an individual and organizational ability to make business-critical decisions.

3. Method

In this section, we will describe the outlay of the research design, how the data was collected and how it was analyzed.

3.1. Research design

In the pursuit of answering the research question of this study, we performed a single case study of the operational risk practice of a Swedish public pension fund, which we have given the alias "PensionCap". Through a qualitative methodology, we explored the operational risk practice of the state pension fund and how it implicates decision-making. We sought to understand the social phenomenon underlying the construction of a risk practice, and most importantly, how this construction is used by the involved parties, with a focus on decision-making. Therefore, it was necessary to seek depth and conduct more than one interview with several people, and especially alternate interviews with parties who normally interact within the risk practice, to gradually gain an understanding of the communication, exchange, and dependencies between them. All this speaks for a qualitative methodology and is also characteristic of interpretative research, in that we seek to understand the *meaning* of events in an *exploratory* manner (O'Leary, 2007). It was therefore, from a resource perspective, a need to compromise breadth for depth and conduct a single case-study, even though a multiple case-study would have provided conditions for comparisons and thereby a better base for theory building (Eisenhardt & Graebner, 2007). However, a deep description and understanding of an empirical phenomenon are more easily achieved with a single case study (Eisenhardt & Graebner, 2007), and therefore is the preferred method with our empirical setting and research question.

The general subject of risk management is quite mature, but the specific niche of operational risk within it is much less studied. Furthermore, a state pension fund is rarely covered as a case organization in previous studies. With Edmondson & McManus' (2007) methodological framework, which contrasts the suitable methods for different maturity of prior theory and research, our theoretical setting is believed to be somewhere in between the nascent and intermediate state, where the collection of qualitative data together with an open-ended research question is deemed the most appropriate approach. Even though we, based on previous research, could have some expectations about the case organization's risk practice, it was not possible to foresee the character of most of our empirical findings. This led to great variations in the supporting interview guides during the data collection phase, as questions became more specific and focused the further we got with the interviews. Furthermore, it led us to develop the theoretical framework in parallel to conducting the interviews, as we began to learn more about the organization's processes, the tensions that we could identify, and what theoretical

perspective could aid our analysis of these processes and tensions. Common in all interviews was the aim to bring out the perceived reasons behind a certain process. Therefore, we did not only ask about their how they carry out their current activities, but we also sought to understand the underlying personal motivation for doing so.

3.2. Data collection

The collection of data for this study was made through semi-structured interviews, passive participation in a risk meeting, and by taking part of internal documents and policies related to the investment process and the operational risk practice. By using semi-structured interview as the foundation for data collection, we were able to adjust and modify interview questions to account for new insights and the specific expertise of the interviewee interview subjects' expertise and context. Interviewees were allowed to go past the interview guide in order to share their personal experiences and reflections. We focused on allowing the interviewees to share their personal experience and reflections, which sometimes meant the conversations were held outside of the scope of the interview guide. This enabled us to get additional color on central topics related to how, for example, different individuals create comfort. Although the interviews' flexible structure increased our ability to understand actors' unique perception, it somewhat decreased the comparability between interviews. However, since we always centered around the same risk practice with all interviewees, we could still make comparisons between interviews and actors with similar roles. To increase the likelihood of receiving truthful answers in the interviews, we communicated at the beginning of each interview that the case company and the interviewee will be anonymized (Bryman & Bell, 2015).

In total, 13 interviews were held throughout a period of six weeks. The full list of interviews is disclosed in the appendix. To ensure reliable and accurate interpretations of the interviewees' answers, both authors participated in all interviews (Bryman & Bell, 2015). We argue that this approach is important not only to be able to discuss and reflect on the insights gained in the interviews, but also to avoid biases. Our interview subjects consisted of all actors directly involved in the studied risk practice, as well as actors indirectly involved with the practice. Amongst the actors that are directly involved with the risk practice, we interviewed the Head of Alternative Investments, the portfolio managers of Alternative Investments, and the members of the Operational Due Diligence ("ODD") team, including the Head of Risk Control. One of the challenges we faced was that the number of people involved in the risk practice is limited. Acknowledging this challenge, we held multiple interviews with the portfolio managers and some of the internal experts. Follow-up interviews were conducted after we had sufficient time to digest and analyze previous interviews, enabling us to use these interviews to dive deeper into specific areas of interest. In addition, we expanded the empirical scope to include those who are indirectly involved, both within and outside of the organization. Within the organization, we ensured to get the views of senior managers, such as the CEO and Head

of Risk & Operations. This also provided us with a better understanding of the overall strategy and direction of the fund and made it clear how that has impacted the specific risk practice that we are studying. Outside of the case organization, we interviewed representatives from a general partner ("GP"), in whose fund PensionCap is currently invested, and representatives from the Institutional Limited Partner Association ("ILPA"), an association working for the interest of limited partners ("LP") such as PensionCap. At ILPA, we interviewed the people responsible for developing the standards and guidelines provided to LPs regarding operational due diligence. The interviews with parties outside of the case organization, the GP and ILPA, provided us with alternative perspectives to those raised during the interviews with PensionCap and helped us understand what is characteristic for PensionCap specifically, and what is common for LPs of their size in general. It also helped us understand how personal aspects of the people involved in the investment process have impacted the risk practice. However, this is not comparable to conducting a multiple case study, where these differences are directly observed, rather than described, as is in our case.

The interviews were held remotely via video call and were recorded with permission from the interviewees. Directly after each interview, we discussed and reflected upon what had been said as well as formulated new questions that had arisen during the interview. The interviews were manually transcribed in close connection to the interview being held. The reflecting notes and transcriptions were continuously revisited to provide direction and guidance for further data collection. When we observed the meeting related to operational risks, which was a meeting where the ODD team discussed the counterparty's answers in the Operational Due Diligence Questionnaire (explained in section 4.3.1), no recording was made. Instead, detailed notes were taken of the topics covered and how the ODD team and the Portfolio Managers interacted with each other. In this meeting, we did not ask any questions aside from a concluding question where the participants were asked to reflect upon how representative they viewed this ODD meeting.

The documentation which was provided to us by PensionCap was a fund specific risk management plan, risk guidelines, risk manual, and guidelines for decisions in Finance Committee. The first three documents thus apply to the whole of PensionCap, not only Alternative Investment, and the latter apply mostly to Alternative Investment, since that is the only division in which all investment decisions need to be made by the CEO in the Finance Committee (explained in 4.3.1). We were also provided with the Operational Due Diligence Questionnaire that is used for the ODD as well as documents describing the investment process.

3.3. Data analysis

The qualitative data that was gathered from interviews, observations, and internal documents were analyzed in an iterative manner, where we went back and forth between

tensions in the empirical data, previous literature, and potential theoretical perspectives. As mentioned, the theoretical framework and the research question were developed as the interviews were held and as it became more evident which theoretical concepts were appropriate for analyzing the social phenomenon that emerged from the data collection. To combat for explanatory interpretive research's common challenge of validation, we spent considerable time on the notion of plausibility (Lukka & Modell, 2010). What this means is that we throughout the data collection and analysis continuously tried to understand whether our explanations and interpretations could be perceived as plausible.

The previous research on risk management, and in particular operational risk management, was especially helpful to understand how the context of PensionCap as a public pension fund and the fact that the interviewees are investment professionals affected the construction of the risk practice. By attempting to rule out this impact, we sought to expose the impact of variables that are unrelated to context. Hence, we sought to avoid drawing conclusions regarding behaviors that rather are explained by PensionCap's context, and therefore should not be analyzed with social theory, such as comfort theory. The iterative process also allowed us to gradually adjust the study's focus and perspective to optimally complement and nuance previous studies, based on the potential in the empirical data. Since the qualitative methodology is based on a single case study, the analysis and conclusions were made through abductive reasoning (Lukka and Modell, 2010). In the empirical analysis, the details and chronology of the process for assessing and managing operational risks were mapped out and organized into distinguishing themes. These themes later provided the structure for the discussion, where the theoretical framework and its central concepts were applied.

4. Empirical analysis

In the following section, we will present the findings from our empirical analysis. First, we will present the context of the case organization and the background of the empirical setting we have studied. Then, we will present our empirical findings, centered around how the case organization has built its operational risk practice on a wide definition of operational risks as well as how the risk practice contributes to the creation of comfort for the investment decision.

4.1. Background and context to the case organization

Our case organization, "PensionCap", is a public pension fund that together with three other funds make up the buffer funds of the Swedish public pension system. PensionCap manages SEK ~500bn in capital, which it aims to manage in a way that generates high return at a low level of risk and that enables the transition to a more sustainable society. The fund has historically performed well, outperforming its long-term goal of 4% in average annual real rate of return. At the end of 2021, the fund had ~65 employees. As a Swedish buffer fund, PensionCap has a dual purpose to: (1) account for potential mismatches in the pension system, and (2) generate high returns at a low level of risk. The primary steering document for the funds is the "AP Funds Act" (SFS 2000:192), which states their purpose, how they should be governed, and the investment rules they must abide by. In 2019, the Swedish parliament decided on changes to the AP Funds Act which affect the AP funds in primarily two ways. First, the funds' investment rules were updated, making the funds' conditions more similar to comparable investors. Secondly, the stipulation that the funds should manage pension assets in an "exemplary manner" through responsible investments and responsible ownership was added. The changes in investment rules enabled, amongst others, increased investments in illiquid assets and increased direct investments.

Enabled by the changes in the investment mandate, PensionCap initiated a strategic shift towards illiquid assets, mainly by allocating capital from fixed income to private market investments. These investments are made by the function "Alternative Investments", which will be the empirical setting of our study, and include investments made in unlisted real estate, unlisted infrastructure, private equity, and private credit. Due to the unit's broad mandate, we will refer to these investments as private market investments going forward. PensionCap currently manages SEK ~80bn in these types of assets. Alternative Investments' portfolio managers are responsible for different sub-asset classes within private market investments, such as infrastructure, private credit, and private equity. The team consists of highly experienced investment professionals, with long and relevant experience from investing, either from a previous role as a limited partner or as a general partner.

Alternative Investments' broad investment mandate has created a portfolio with a wide array of assets, both in terms of the asset type, risk profile, and whether the investment is made indirect or direct. Going forward, particularly infrastructure, but also private equity, are expected to make up a growing share of Alternative Investments' and PensionCap's portfolio. PensionCap's method and involvement when investing directly is restricted by law, so direct investments are made through investment companies, called "platforms". In the platforms, PensionCap's share of the invested capital is typically larger and it has more direct oversight of the operations, for example through seats on the board, even though the involvement in governance varies between platforms. When PensionCap does a so-called indirect investment, it is done through a fund structure, where it commits capital to a fund as a limited partner ("LP"). The fund is managed by a general partner ("GP"), that use the fund's capital to invest in companies according to a predetermined investment strategy and timeline. The GP actively work with the companies in which it has invested to increase their value. After some time, usually around 5 years, the GP exits its investments by selling the shares in the companies in which it has invested. When the predetermined timeline is up, or the fund has exited all its investment, the capital is paid back to the LPs. The lock-in period of the LP's capital varies between private equity funds but is normally in the range of 10-15 years.

The relationship between PensionCap, as an LP, and a GP was highlighted as unique in the world of business. A commonly used metaphor to describe the relationships to us was that the relationship is like a "marriage", alluding to the long-term relationship and the party's mutual dependence. Contrary to other business relationships, such as M&A-deals, where the parties depart from each other after the deal, these investments entail a long-term commitment to each other. The LP entrusts the GP with its capital for a significant period, and the GP relies on the existing LPs to invest in the GP's new funds. This reliance is especially evident in the case of PensionCap, a large and reputable investor, that acts as a "stamp of approval" for the GP's funds.

There are several features of private market investments that distinguish them from public market investments and that need to be considered. During our interviews, three distinguishing features of investing in private markets were commonly raised: (1) it is highly illiquid, (2) it is more difficult to track the value of the investments given that there is no external market pricing, and (3) it often requires external management, either because of investments restrictions or because of the active ownership needed to realize value. When PensionCap makes indirect investments in private markets, the capital is tied up in the fund for a considerable time. During this period, PensionCap's ability to access its capital is limited. However, since PensionCap has a long-term perspective on its investments and a limited need for liquidity, having restricted access to its capital is considered an acceptable trade-off for higher returns and diversification. However, the illiquidity also makes it harder to reverse investment decisions. Another feature that makes the private market different is that it is difficult to determine the return during the

ownership phase. Because of the nature of the investment, returns are normally realized very late in the holding period. In addition to providing a feedback system that could be used for future decision-making, knowing the value of the investment is important for PensionCap's external reporting.

> It's not until the [private equity] fund has exited all its investments and returned our money to us that we can be sure that it was a good investment. We know that in a [private equity] fund's portfolio, there are always going to be some investments that don't turn out great. It's rare that all the fund's investments are good. Typically, some will be great, several will be good, and a few will not be so good. So, you need the full picture before looking back. – Head of Alternative Investments

Lastly, the fact that most of the investments within alternative assets are made indirectly creates another layer of complexity. Since external managers often have a high degree of freedom to operate within the predetermined strategy, PensionCap has limited insight and influence over the GP's daily operations but is regardless exposed to potential mistakes made by the GP.

> In this world, investments often last between 10 and 15 years, and some are 20-25 years or perpetual. This requires a robust framework for working with agreements but also with making sure that we're working with people whose ethics and morals we want to be associated with. We're going to live alongside these people for a long time. – Portfolio Manager I

The complexity of the investments is reflected in the duration of the process for evaluating new investments, which is significantly longer than the corresponding process for other asset classes. The process begins with scanning of incoming and outreaching leads which is followed by quite a long evaluation-period made by the portfolio manager. However, it is not uncommon for portfolio managers to have discussions with a counterparty for years before formally starting to evaluate investing in the counterparty. When the investment has entered the first formal step of the investment decision, it usually takes less than six months to make the final investment decision. After the portfolio manager's evaluation comes the due diligence, which includes commercial, legal, and operational due diligence. In parallel to this, the investment's term and conditions are negotiated with the counterparty. Although the final investment decision is made at the end of the process, the choice to enter the due diligence is usually the most decisive step since that is when the process begins to absorb greater costs as more people, both internal and external to the fund, are involved. The whole investment process is led by the responsible portfolio manager but includes plenty of other internal resources. Besides the portfolio manager, participants include other members of the Alternative Investments team, legal counsels, risk control employees, finance employees, and not at least the CEO, who approves all investments in alternative assets.

As previously mentioned, most of the investments PensionCap makes in alternative assets are made indirectly through external managers with a discretionary mandate. There are primarily four different ways PensionCap receives information about their investments: (1) fund reporting, including incident reporting, (2) the fund's annual meeting, (3) the Limited Partner Advisory Committee ("LPAC"), an advisory board containing the largest investors, and (4) direct interactions with the fund and other informal information flows. Combined, these channels aim to give PensionCap a solid understanding of the progress of the investment and whether the counterparty lives up to expectations. Although PensionCap's has a limited ability to formally influence the GP's decisions, GPs generally try to maintain good relations with their LPs, and especially its largest LPs, not least for future fundraising purposes. Therefore, PensionCap can indirectly influence the GP, even in the cases where it is not on the LPAC. During our interview with one of the GPs that PensionCap is invested in, it became clear that they were highly concerned with regularly updating their investors, providing relevant and transparent information, and improving on operational matters in line with investors' expectations – not only to keep current investors satisfied but also to enable smoother future fundraises. Since PensionCap is not going to be an owner per se, but rather one of the investors in a GP which most often is a very active owner, the best way for PensionCap to be a "responsible owner" is to find a responsible GP. Since the counterparty of a private market investment in most cases is a general partner, the expressions *counterparty* and *GP* will be used interchangeably from now on.

4.2. Constructing a risk practice on a broad definition of operational risk

It became evident during the interviews that the characteristics of making investments in private markets, and especially through an externally managed fund, make the commercial and operational assessments intertwined in some phases. This creates a setting where an array of actors besides the risk-focused employees become involved in the risk practice. Furthermore, PensionCap's definition of operational risk is both wide and sometimes ambiguous. It also became clear that different roles put emphasis on different types of operational risks, where portfolio managers primarily focus on risks related to *people,* and those who carry out the operational due diligence place greater emphasis on *processes*. The motivation for the different orientations is presented below.

4.2.1. People-related operational risks – the key concern for portfolio managers

As discussed in 4.1, the capital in private market investments is tied up for a long period and normally the GP invests in the unlisted assets after PensionCap's commitment is made. In lack of the possibility to evaluate the commercial potential in a current operation, as with listed assets, the portfolio managers, in general, steer their investment decision based on the attractiveness of the investment strategy and their assessment of the fund managers' ability to execute on that strategy. When asked to define operational risks,

portfolio managers primarily highlighted risks relating to people, although concerns regarding the counterparty's processes also were raised. As highlighted by the Head of Alternative Investments: "*[...] I feel that the main operational risk in an investment is ultimately about the team making the wrong investment decision – for me that is the greatest risk."* As such, our interpretation is that the assessment of the capabilities and judgment of the fund managers largely implies an assessment of operational risks.

> When it comes to our investment business and especially risk management it is quite interesting, because you have all these routines and processes, instructions, policies etcetera. But what it is ultimately about is whether people like me feel comfortable or not. […] This line of business is all about relationships. It is not about quantitative analysis; it is about working with people and organizations that we can trust and believe will be able to deliver on what they have said. These are people we will work alongside for many, many years. – Portfolio Manager I

When asked about the biggest operational risks, PensionCap's CEO highlighted similar aspects as the portfolio managers:

> It is very much about the organizations that we partner with sharing our values, and we want the investment teams to have sound values. It must be right commercially, but we do not want to engage in a context with people who don't act correctly or ethically. […] So many things can go wrong, including negative impact on our reputation. If we are going to live with this for as many years as this investment entails, it must be with people or in a context in which we feel 100% secure and have confidence in the people we are investing in. - CEO

The detailed list of operational risk areas can be made long, and there is no single most important aspect when it comes to evaluating the operational risk of the counterparty. At the same time, some all too weak operational areas cannot be outweighed by other parts being stronger. What matters, eventually, is the sum of the whole assessment and that the overall operational maturity is in accordance with expectations, considering both people and process matters, which also lead to interconnections between the commercial and operational assessments in some cases.

> For me, it is very much a question about them having their house in order. […] It is about us wanting to invest with a good counterparty, who has good processes, that is aware of their risks and keeps track of regulation and all of that. That lowers the risk in our investment and increases the probability that the investment turns out good. It is not possible to put one against the other because we would never do an investment only because it came out great on the operational due diligence if we do not like the strategy, and we would never do an investment in a good strategy but where the other areas are poor. – Head of Alternative Investments

> I would probably say that it is the whole picture. We can allow some flaws if other areas are satisfactory. The most common is that they [GPs] are undeveloped with regards to sustainability, both in terms of how to integrate that into their due diligence and for reporting and following up. But if we see genuine intentions to improve and a willingness to receive input from us, then that [imperfections] is something we can be forgiving about. – Portfolio Manager II

4.2.2. Addressing process-related operational risk through internal experts

Later in the investment process, the people involved in the operational DD investigate in more detail the maturity of various internal processes and policies. PensionCap has subject-matter experts responsible for assessing their respective areas of the Operational Due Diligence Questionnaire ("ODDQ"). These individuals do not assess the commercial aspect and their contact with the counterparty is normally limited to the answers they receive in the ODDQ and eventual meetings for follow-up questions. In contrast to the portfolio managers' focus on people, the Head of Risk & Operations underlines how the presence of well-functioning processes and routines, advantageously, can make the organization less dependent on individual fund managers:

> The risk that we see with a private equity fund or equivalent - which is precisely what we try to ringfence – is whether they have good routines in place, good policies concerning ethics and morals, a sustainability policy, whether we have the opportunity to influence them in terms of our investment guidelines, like exclusions, whether they have an AML-policy if they are under anti-money laundering regulation, and if they are under external supervision from a Financial Supervisory Authority or equivalent, also follow those regulations. […] A private equity fund is very dependent on this expert competence [of individuals in the GP's team], and it's often a few people who are the driving force, who are very passionate. With good operations established and with good routines and processes, you begin to have a well-oiled machinery that works without being that dependent on a few individuals. – Head of Risk & Operations

However, even though the ODD team carries out slightly more binary controls, they are also concerned with "the full picture" and the consistency in the counterparty's answers, giving them a feeling for the GP's credibility and maturity.

> It is not just the individual questions [in the ODDQ], but we get quite a good picture of the kind of counterparty based on their answers. What is the culture around transparency, how structured are they, and what kind of organization are they? Is it a complete mess without anything in place? Then that's probably nothing that we are eager to invest in, regardless of the strategy. – Legal counsel, part of the ODD-group

> The way I approach it is to get a feeling, an overview. You do not stare blindly at one question. […] I look at the answers, but I also look for consistency in their answers so that I get a feeling for the common thread and how things are connected. – CFO, part of the ODD-group

In summary, the definition of operational risk associated with alternative investments is not completely straightforward, and the emphasis varies slightly between roles. Our assessment is, though, that the general view for PensionCap is that operational risks in great are weaknesses or inadequacies in *people* or *processes*, which is aligned with the commonly adopted definition of operational risk. It also emerged that the fear of having weaknesses in people or processes is a combination of concern for monetary losses and reputational damages. As a large and public investor, PensionCap is dependent on having a reputation as an ethical and responsible investor to ensure its "license to operate", as expressed by the Head of Alternative Investments. In that regard, the implications of being associated with the "wrong company" are worse than investing with an ethical partner who underperforms, although neither is desirable. However, even though the external pressure was mentioned, there was equally strong pressure from the individuals themselves in wanting to seek trustworthy partners.

4.3. Becoming comfortable with uncertainty in the investment decision

The wide definition of operational risk is met by a risk practice that contains various types of assessments, both formal and informal, that largely build on social interactions for exchanging and challenging perceptions. We have summarized the identified practices in table 2 below. The practices are listed by when they occur in the investment process, although some overlap exists. We argue that the practices have both "core" and "enabling" activities, where the former are the essence of the practice, and the latter are activities that enable PensionCap to achieve the core activity. For example, on-site visits enable portfolio managers to have informal conversations and make observations more easily than when they meet the counterparty digitally. Thus, it enables one of the core activities of the interactions with the counterparty.

Practice	Core activities	Enabling activities	Key actor
Deciding the investment scope	• Screen leads against investment scope (geography, size, theme)	• Create investment strategy for alternative investments	• CEO • Strategic Allocation • Head of Alternative Investments • Portfolio Managers
Interactions with the counterparty	• Formal meetings • One-on-one interviews • Formal and informal observations and conversations • Gathering references on GP	• Internal alignment within team • Conduct interviews together with a colleague • Physical meetings • Build network of LPs	• Portfolio Manager • Head of Alternative Investments
Operational due diligence	• Send out ODDQ • Analyze answers • Convey follow-up questions • Write verdict (ODD team) • Communicate findings to GP • Background check of key personnel by third party	• Discuss findings and perception of ODDQ answers • Discuss expectation level • Provide input on wanted improvement areas to negotiation	• ODD team: Risk Control, Compliance, Legal Counsel, Sustainability & Governance, CFO • Portfolio Manager
Legally and non-legally binding agreements	• State terms and conditions as well as expectations towards counterparty	• Discuss priorities of requests	• Portfolio Manager • Legal Counsel
Finance Committee	• Formal investment decision	• Preparatory meetings	• CEO • Portfolio Manager • Head of Alternative Investments • Risk Control
Continuous monitoring	• Stay updated on the progress of the investment	• Set clear expectations towards GP • Follow-up on expectations	• Portfolio Manager

Table 2. An overview of PensionCap's practices for managing operational risk

We argue that the many social interactions of the risk practice and how they involve a wide array of actors are key for PensionCap to gradually build comfort around the risk level of the counterparty. The empirical findings regarding what we deem as formal and informal activities of PensionCap's risk practice, and the dynamics of comfort seeking are presented below. What defines a formal or an informal activity is explained in 4.3.1. and 4.3.2, respectively.

4.3.1. Formalized activities as the foundation of the risk practice

The operational due diligence ("ODD"), the legally and non-legally binding agreements, and the Finance Committee meeting are what we classify as the three formal activities of PensionCap's risk practice. We call them formal activities since they are described as formally designated parts of the operational risk practice and have direct connections and consequences for the assessment and management of operational risks. The ODD is the only one of these three that solely concerns operational risk. The legally and non-legally binding agreements with the counterparty state terms and conditions for the investment

as a whole but also include terms and formulations that aim to mitigate operational risks that are either general or specific for the counterparty. The Finance Committee meeting is the formal decision point for the whole investment process of alternative investments and its connection to the risk practice is the formal documentation in the shape of verdicts from the operational due diligence that it requires.

The ODD is regarded as the cornerstone of the risk practice. It centers around the research and analysis of the counterparty's operational processes and is conducted by the ODD team, consisting of representatives from different departments at PensionCap. The team members act as subject experts for their respective fields and the team consists of the Head of Risk Control, the Compliance Manager, two Legal Counsels, the Sustainability & Governance Manager, and the fund's CFO. For example, PensionCap's Head of Compliance is responsible for evaluating the counterparty's compliance practices. The ODD process is summarized in table 3 below.

	Key activities	**Key questions**	**Responsible**	**Key material**
Information request	• Send out ODDQ to GP • Inform ODD team about entering DD-phase	• *N/A*	• Portfolio Manager	• Operational Due Diligence Questionnaire
Analyze information	• Analyze ODDQ answers • Summarize GP's operational risks	• *What is the operational risk level of this investments?*	• ODD team	• Summary of findings
Discuss findings	• Discuss findings in a joint meeting	• *Are we willing to accepts this risk level?* • *Do we want to mitigate some risks? How?*	• Portfolio Manager • ODD team	• ODD meeting
Risk mitigation	• Discuss how to address potential yellow or red flags	• *What mitigation actions should we request?* • *Should we demand them formally/ informally?*	• Portfolio Manager • ODD team	• Limited Partner Agreement • Side Letter • Informal agreements
Score the ODD	• Assess the operational processes on a scale of 1-5 and include in investment memo	• *How do I value the operational risk level associated with this investment?*	• Portfolio Manager	• Investment Memo and Recommendation • (Finance Committee)

Table 3. An overview of PensionCap's process for Operational Due Diligence.

The operational due diligence questionnaire ("ODDQ") is the central document in the ODD and contains PensionCap's questions about the counterparty's that are sent to the counterparty to answer. The questions cover governance and compliance, risk management, operations and internal control, accounting and valuation, and sustainability. It is an extensive document that after it has been answered by the counterparty contains a significant amount of information. PensionCap also requests to see a few of the policies they ask questions about, but generally, they only assess the

answers provided in the ODDQ and ask follow-up questions and clarification on those answers. Meanwhile, all members of the ODD team write a statement where they bring forward their assessment of the risks and the quality of processes within their area of focus. It was mentioned that to be completely comfortable in the validity of their written statement, one would have wanted to go further and investigate the documentation underlying the answers in the ODDQ, but due to limited resources, PensionCap is required to be pragmatic about the extent of information they go through. In that way, there is a trade-off between learning about the counterparty and rationalizing the usage of resources:

> We have made a conscious decision, since we are quite few who do the ODD, to firstly look at the answers we receive. Normally we do not verify that the answers are true by requesting all the documentation from the investor [GP]. We don't have the resources to do so. If we had requested all the material, it would mean going through thousands of pages [for all investments] and we would also need to assess all that. Our approach is to trust the answers they provide us with, and they are required to provide us truthful answers. - Head of Risk Control

The existence of a formal ODD is a direct consequence of PensionCap's increased focus on alternative assets. PensionCap has historically only allocated a small portion of its portfolio to this asset class, and the ODD is one of the practices that was created to address the increased investments in alternative assets. Previously, a lot of the same questions were addressed, but not in the same formal manner and not with the involvement of the subject experts that now are members of the ODD team. As the decision was made to allocate more capital to alternative assets, the Alternative Investments-team was expanded as the current Head of Alternative Investments and additional portfolio managers were employed. Expecting to handle more investments and a larger portfolio within this space, the Head of Alternative Investment together with the CEO felt the need to structure and expand the approach for assessing operational risks in these investments, as well as to engage and get the views from the subject experts. The development of the operational due diligence was then led by the Alternative Investment team, where Portfolio Manager I, which had previously worked at an established LP in the PE space, was tasked with leading the project group that developed the ODD. Besides the Portfolio Manager, the project group contained some of the people that are now part of the ODD team.

When designing the ODD questionnaire, PensionCap used the due diligence questionnaire ("DDQ") of the Institutional Limited Partner Association ("ILPA"), a leading industry association for LPs. ILPA's DDQ is a broad questionnaire developed to guide LPs in their due diligence of GPs and to simplify and streamline the GPs' process of answering questions. ILPA has an established position in the alternative assets universe and is regarded as an authority by the people we spoke to. This reputation made it natural for PensionCap to choose ILPA's template as a starting point. PensionCap's subject

matter experts were responsible for reviewing the questions in the template that related to their area of expertise and to make changes as they saw fit. In addition, the project team consulted with other LPs on how they perform their ODD as well as participated in education hosted by ILPA. The questions are continuously reviewed, often when the ODD team experiences that they either do not get the information they are looking for or do not need the information. In the interviews there were some comments about a potential need to further rationalize and reduce the number of questions in the ODDQ, which is a natural difficulty when the format originates from ILPA's extensive DDQ. It is our perception that an alternative route would have been to build the questionnaire bottom-up, starting with what PensionCap views as the most critical operational risks. However, there are enabling and comforting aspects of leaning against ILPA, since it gives legitimacy to the GP required to answer the questions, and the team of PensionCap is certified that they have not overlooked what others deem as crucial operational questions.

> The ODD is an opportunity for us [Risk Control] to familiarize ourselves with the investment, unlike our investment in listed assets for which we can measure performance and risk every day. If we had not had the ODD, we would of course have trusted the portfolio managers and that they had done their due diligence, but then we would sit there with an investment we know little about. It [the ODD] gives us the possibility to assess the operational risk. – Head of Risk Control

The purpose of the ODD is, as outlined above, to get an understanding of the counterparty, focusing on its processes. Even though there is some overlap between the ODD and the investigation and evaluation before the DD, it does seek to uncover new information.

> I don't think that they [portfolio managers] look at all the parts that we uncover in the ODD. […] They think about the investment risks, which captures a lot. It is not the case that operational risk is only managed in the operational due diligence; it is considered also in the investment DD. – Head of Risk Control

Even though a lot of resources are spent on the ODD, is it rarely determinant for the decision to invest. In most cases, there is a strong conviction within the Alternative Investments team on the opportunity before entering the ODD. The ODD is simply not about finding "upside" with the investment, but rather a search for downside protection.

> In a way, it [the ODD] is a control of their controls. […] At this stage, we're already in the middle of the DD phase, and I've already decided that I want to invest. If it then shows that they [the counterparty] don't live up to our standard, then I haven't done my job properly. I should pick up those things along the way. [...] The purpose of the ODD is not to say, "We should invest" but rather "there are no reasons why we shouldn't invest." – Portfolio Manager I

That does not necessarily undermine the importance of the ODD, but what it provides is an assurance of the portfolio manager's perception of the counterparty. What may be an act of discomfort, to challenge the view of the portfolio manager and expose potential weaknesses, normally lead to comfort in the team as more people with different roles critically have inspected the counterparty. With the Head of Risk Control present in the Finance Committee meeting, there is also an informal opportunity to protest if the portfolio manager not sufficiently considers the opinions of the ODD team. In a way, this becomes a mitigation activity for the operational risks within PensionCap. Since a great part of the investing business relies on relationships, the intended objectivity of the ODD works against the risk of the portfolio manager becoming biased towards the counterparty. Other, more indirect, values of the ODD include the side-effect of the process being educational for less mature GPs on a LP's expectations level, indirectly driving a gradual improvement as they until the next fundraise will strive to comply with more aspects of the ODDQ, and it also enables the ODD team members to develop their expertise within the subject and recognize best practices.

> A nightmare scenario is that you end up in bad company – investing with someone who commits fraud, or someone that you simply don't want to be associated with. That's what we want to address in the operational due diligence. [...] If this would happen, there's the obvious monetary loss, but you also need to consider that someone needs to sort all of this out. It's a lot of work, and as a larger investor, you can't slip away and just let someone else deal with it. - Portfolio Manager I

When the ODD team has collected and analyzed the counterparty's answers, they discuss their respective conclusions and recommendations in a meeting where all members of the ODD team participate along with the responsible portfolio manager. Portfolio Manager I described the purpose of this meeting as *"what we try to achieve is to make sure that we understand and are comfortable with the investment"*. In this meeting, all the members of the team can get an insight into the different areas of the counterparty's organization and its overall maturity. In the later stage of this study, we were able to passively participate in one of these meetings. There were some features of the meeting that we found especially interesting, which are summarized in table 4. According to the members of the ODD team, the meeting we participated in was especially rich in discussions due to the investment's complex structure and because it is a new relationship for the fund.

Feature	Example
Information asymmetry	• The members of the ODD team had limited knowledge about the investment before the meeting • The participants spoke as experts of their respective field and appeared to have a significantly higher level of insight into "their" fields than the other members
Active risk management	• The participants actively discussed what the operational risks were with the investment and whether they could be mitigated
Power balance	• All participants seemed to be able to express their opinions unhindered. • The meeting was led by the portfolio manager, but this person was also being "interviewed" about the investment by the ODD team.
Trust	• The members were responsible to state their opinion about their respective fields and the starting point was to trust these opinions, even though follow-up questions were asked

Table 4. Summary of insights from the ODD meeting.

When the ODD was described to us in interviews, the need to see the counterparty's organization in the light of its age and size was often mentioned, for instance a smaller fund is expected to have fewer policies and processes in place than a larger fund. As such, the findings from the ODD need to be compared with the overall profile of the investment and what could be considered reasonable. Oftentimes, and since the ODD goes into such a high level of detail about the operational process of the counterparty, the ODD team exposes various imperfections or slight weaknesses, not being deal-breakers in themselves, but that they wish the counterparty to address and improve upon within a certain timeframe, which the Portfolio Manager then bring forward. At the end of the ODD, the portfolio manager summarizes the assessment and assigns it a score of 1-5, where 5 is the best score. As such, the score is not set by the ODD team. This score and the statements from the ODD team members are enclosed with the investment memo and are the input, together with the Portfolio Manager's assessment of the team, that is provided to the Finance Committee and CEO regarding the assessment of the operational processes and risks.

The subjective judgments, which are core in PensionCap's risk practice, are normally seen as valuable, not problematic, and many parts of the risk practice are structured to utilize the involved employees' expertise and experience for assessing the risk level. However, one associated difficulty in the operational due diligence was to turn the counterparty's answers into insightful judgments, hence, assessing what increases the risk. PensionCap strives to be pragmatic and cautious about the usage of time and cost of both internal and external resources. To enable planning the usage of further resources, it becomes critical to closely assess what it means that a certain policy or process is absent, rather than merely state that it is missing. However, the process of striking that balance is still under development. Furthermore, the method of basing a risk practice on judgments differs from the fund's more quantitative management of other risks, such as credit and

market risk. A feature of quantification in the operational risk practice is though the scoring of the outcome of the ODD made by the Portfolio Manager. This, however, serves primarily as a tool for communicating a judgment in a dense manner.

Although the ODD in its current shape has been in use for a few years now, it was made clear that it is still under development. Mainly two areas for development were raised: (1) to create an internal standard for PensionCap's expectations of a counterparty; and (2) to develop a structure to follow up on improvement measures that PensionCap requests from the counterparty. Quite regularly PensionCap requests the counterparty to improve on certain parts of its operations, but there is currently no formal way of following up, nor a defined process or supporting system in place. Rather, it is done on an ad-hoc basis. However, due to the dynamics of these investments, where there is an ongoing relationship and PensionCap is often invested in more than one of the GP's funds, there is often a natural continuous evaluation of the counterparty. Additionally, many interviewees highlighted the desire to compare the counterparty towards an established "best practice" to better understand areas of development.

In parallel to the ODD, PensionCap uses an audit firm to do an "integrity and sanction" screening, which aims to uncover factors that could be cause for concern. Things that the audit firm review is whether key personnel are subject to sanctions, a party in a legal dispute, and general coverage about the key personnel. Anything is rarely found in this screening, but the process is carried out rather as an extra cushion and to gain external assurance that nothing is to be found. PensionCap normally expects the counterparty to inform them in beforehand of any information that might arise in this screening.

As the most evident activity for mitigating risks, PensionCap make sure to protect themselves for the worst potential outcomes by including relevant rights, commitments, and obligations in various scenarios in the terms and conditions ("T&C"). These agreements also list certain key person and declare what additional rights come to place if too many of these would leave, enabling PensionCap to impact decision-making in the fund if they would need to. The T&C associated with an investment primarily comes in three different forms: (1) Limited Partner Agreement (LPA), which is an agreement between all LPs and the GP, (2) Side Letter, which is an agreement between a specific LP and the GP, and (3) informal agreements, which include agreements between an LP and the GP that is not legally binding, but both parties are working towards fulfilling their commitment.

PensionCap's general approach is that the same conditions should apply to all LPs, and as such, they try to push for getting many their demands in the LPA instead of the side letter. In addition, some aspects are specific for PensionCap as a public organization and those are addressed in the side letter. As discussed above, PensionCap can uncover things about the counterparty in their informal and formal evaluation that they want to address. Depending on the nature of what is being addressed, PensionCap can often choose to

make agreements outside of the formal agreements. For example, it could be that the counterparty does not have a compliance policy or someone responsible for those types of questions. Hence, the risk for a compliance breach is then presumed to be elevated. PensionCap and the counterparty could agree that the latter should create and implement a compliance policy within a predetermined timeframe. However, the difficulty lies in assessing what imperfections constitute an increased risk and must be met with a mitigating action. However, there is always a trade-off between the demands PensionCap makes and the fact that the counterparty might not be willing to accommodate all requests. Therefore, PensionCap is required to remain pragmatic, considering the time and resources needed to both negotiate and convince the GP of certain improvements, and for PensionCap to adequately follow up on these matters.

As stated earlier, PensionCap's risk management guidelines require all investments in alternative assets to be approved by the fund's CEO. The investment decision is formally made by the CEO in the Finance Committee ("FC"), however, the commercial investment decision is implicitly made in advance of the FC, making the meeting more of a formal approval of the investment rather than a platform for discussing investment opportunities, as the CEO has been familiarizing with the investment through several meetings with the Portfolio Managers.

> The Finance Committee is the last formal step. The Alternative Investments has been in contact with the investment often for more than a year. In addition, they have had ongoing meetings with the CEO to make sure that they should take the next step. So, when an investment comes to the Finance Committee it normally takes 15 to 20 minutes per case. It's the final sign-off that everything is okay and looks good. An investment shouldn't get rejected there if we have done our homework properly. – Head of Risk Control, secretary in the Finance Committee

4.3.2. Informal activities to complement the search for comfort

As a complement to the formal activities for risk assessment, there is a range of activities that are not formally included in PensionCap's risk practice for assessing operational risks, but still make a significant contribution to that task. We will refer to these activities as "informal" activities in PensionCap's risk practice. These activities may be a part of a formal activity within the investment process, such as establishing the investment scope, and has an indirect effect on the management of operational risks even though the activity is not primarily addressing these. The intertwining with the commercial analysis is therefore more present in the informal activities, and they naturally involve the portfolio managers and other strategic roles, such as the CEO, to a greater extent. Generally, when commercial and operational aspects are both present in the same analysis, the commercial assessment aims to find upside with the investment and the operational risk assessment aims to reduce the potential downside. Referring back to table 2, the informal activities include establishing the investment scope, interacting with the counterparty, and

performing continuous monitoring of the GP after the commitment. With regard to section 4.2 and the definition of operational risk, it is necessary to clarify that there is not a clear-cut division in the sense that formal activities evaluate the process-related risks, and informal activities evaluate the people-related risks. Rather, both parts of the definition are considered in both formal and informal activities. Because it is the whole picture of the counterparty that eventually matters, there are difficulties with categorizing what part of the operational risks each activity explicitly evaluates.

To begin with, operational risk exposure has been an influencing factor in establishing the basic investment frame even though it is not the only nor in most cases the most prevalent factor. For most of it, the core focus of the investment strategy is determined by the fund-wide strategy and the specific strategy for alternative assets, but operational risks are considered when drawing the outer line and determining specific exclusions from the investment scope. Just as with the operational due diligence, operational risk at this stage is considered to avoid downside. The CEO and Chief of Strategic Allocation together with the Head of Alternative Investments are responsible for setting the strategy for alternative assets. When asked about the consideration given to operational risks when deciding the investment strategy, we received the following answer from the Head of Alternative Investments:

> If you consider reputational risks an operational risk, then absolutely. Also, increased operational risk is a factor in the decision to have limited investments in emerging markets. These markets generally have a higher risk relating to for example corruption and human rights violations. [...] Another part is that we want to avoid the risk of having to manage a complex tax structure if circumstances change. We want the people we invest with to spend their time on developing their investments, not on trying to re-arrange its tax structure to fit with new rules. That could damage both our and the counterparty's brand and reputation. – Head of Alternative Investments

It became clear during the interviews how important the interactions with the counterparty are to assess the operational risks. These interactions typically occur over an extended period and are the key enabler for the portfolio managers to build their confidence in the counterparty's abilities and to assess if they have the right qualities to make reasonable investment decisions. Considerable time is spent evaluating, not only the track record of the fund, but also the culture at the counterparty and the behavior, values, and motivators of the counterparty's people. With smaller teams, PensionCap often requests interviews with all team members, including more non-senior staff, to circumvent the organization and verify the answers received by senior managers. It is not only the structured interactions that matter, all interactions, including casual small talk in connection to meetings, are considered by portfolio managers when they form a perception of the people at the counterparty:

> A central focus for us, in parallel with the commercial and strategical aspects, is the counterparty's team and their values. We want to understand their background and experiences, to make sure that they are responsible and want to do good things. [...] We ask questions about how they have acted in different situations, if they have done what they have said they'll do, how they have handled and acted in a tough situation, for example, if a portfolio company didn't do well. We make all these "tests" to make sure that this is someone we can work together with. I think we can eliminate many of the "red flags" by doing this. – Head of Alternative Investments

The format for these interviews varies, from structured interviews to more relaxed conversations. Although these interviews and conversations form the foundation of PensionCap's efforts to understand the counterparty, other observations are also valuable. Portfolio Manager II highlighted that visiting the counterparty on-site enabled observing the counterparty's culture:

> It's a question about culture and values. For example, it's to see how a senior employee behaves towards a junior colleague or service staff. Everyone is always really nice and accommodating towards me - that's because they're trying to sell me something. But if you're not nice towards your colleagues, that's a fundamental flaw. Even if you are a brilliant investor this might create undesirable consequences such as the inability to retain talent and other critical resources. It's hard to make an investment dependent on an individual star who also happens to be a dictator. – Portfolio Manager II

However, even though meeting physically certainly gives conditions for evaluating people's behavior and observing interactions, it cannot serve as the only method to do so. To overcome deficiencies in the portfolio managers' own ability to judge another person, the physical meetings need to be complemented. Portfolio Manager II points out:

> One should not overestimate how good one is at judging character and assume that just because you have meet with them physically, you have made a perfect assessment. So, I think you need a combination of meeting physically, having many meetings, and meeting a wide group of counterparty representatives. – Portfolio Manager II

When conducting the various interviews with the people of the counterparty, both on-site and via a digital meeting, it was highlighted that it was beneficial to conduct the interviews in pairs. Not only has it practical benefits, but the value also comes from reflecting and discussing observations with someone else to see if they align, and when they don't, discuss why that is the case. PensionCap also seeks references on the counterparty from external sources, including people and organizations that have conducted business with the counterparty, such as other LPs. Combined, this helps to form a perception of the counterparty's culture and people.

As the ultimate decision-maker, the CEO has a close dialogue with the portfolio managers to discuss the strategy and investments currently under consideration. Most of the CEO's knowledge about the investment and the counterparty comes through alignment meetings with the Alternative Investment team. However, in some cases, the CEO also ensures to have own meetings with senior managers at the GP, to gain a first-hand view and feel for the counterparty.

> My involvement is not in the ODD by, for example, speaking to the compliance-unit at the counterparty, there are others who do that. Rather, I would meet and speak with the senior people on the other side, it is there the values must be right. Because if the counterparty on the other side are people who we do not trust, we can assume that the operational processes are not good either, that is usually connected. – CEO

A key benefit of the informal activities is that they act as complements to the formal activities, and primarily the ODD. Even though the ODD is an extensive activity where a significant amount of information is collected about the counterparty, some things are hard to learn through a questionnaire. Interviewees often highlighted the need to complement the ODD with activities that give them richer information and insights about the counterparty. In fact, some even highlighted the risk of lending to much trust into formal risk practices:

> A certain level of processes [at the counterparty] is important and sifts away the most inexperienced, which is completely necessary. But I see a risk of going too far in the requirements that is placed on private market managers. And it gives a false sense of comfort as well. […] I do not think that just because you have managed to check your 17 boxes in a questionnaire you can lean back and say, "there is no risk here, all risk is gone". – Portfolio Manager II

It was evident that there were some skepticisms towards further formalization and enlargement of the ODD, mainly because it was thought to remove the sense of accountability but also because it could give a false sense of comfort. Throughout our interviews, there was a skeptical attitude towards the ability of quantitative models to relate to operational risk, or even be indicative in terms of the level of operational risk. Rather, it was highlighted that the value lies in the qualitative judgments and professional opinions formed by both portfolio managers and internal experts. It furthermore points to the value of the so-called informal activities, and how both formal and informal activities jointly should aim to facilitate qualitative assessment by the involved actors. The collaboration, engagement, and discussions between the width of actors involved in the risk practice are furthermore emphasized as the key enablers to avoid fallacies and to get as close to a true sense of comfort as possible:

> I think that it will always be about probability. The probability that you have asked all the relevant questions, that you have received truthful answers on these,

> and that our organization with different people responsible for different parts, has a coherent picture. Because if someone has a bad gutfeel when everyone else has a good gutfeel, then it is important to follow up on why that is. […] We try to do a broad review and look for consistent answers, make sure we have a consistent feeling and that all people involved have a similar picture. I think that is as close as it gets, in term of having a true sense of comfort. – Portfolio Manager II

After the commitment between PensionCap and the counterparty is made, the investment moves into the phase of management, with continuous monitoring through regular reporting from the counterparty regarding the progress and valuation of the portfolio companies. Monitoring is also made through yearly meetings, held physically at the general partner's office, where they perform deep dives into the portfolio, the market development, and specific cases with some of the CEOs from the portfolio companies present. This becomes a mechanism for being updated on the development of the fund, and a reassurance that the counterparty is acting within the prescribed and intended strategic range. However, the management of operational risks is to some extent visible in this contact, as the portfolio managers can evaluate how well the operational processes is working and if the perception of the counterparty's credibility created before the commitment remains. Though, because of the set-up terms and conditions discussed in 4.3.1, the responsibility lies on the counterparty to inform PensionCap if any major breach would occur, which removes some of the responsibility for oversight from PensionCap:

> We have requirements in our agreements that if there are major incidents that have an impact on the value or that may have a significant reputational risk, they must notify us. […] So, they are required to inform us if there is a lawsuit or a bankruptcy or similar. – Head of Alternative Investments

A commonly mentioned potential improvement was to find a systematic procedure for how to follow up on the findings of the ODD, which not yet has been developed or implemented. Even though a reasonable explanation for this is that the team have not had time or resources available to develop such a procedure, the fact that it has not been a priority indicates that having profound knowledge about the existing risks and security in the legal agreements are more important for feeling comfortable about entering the commitment.

5. Discussion

The focus of our research question is to understand how an operational risk practice is constructed and what role it plays in decision-making. We argue that the studied operational risk practice is constructed as a collaborative effort that gradually builds individual comfort around a counterparty's risk level, which through transfers between managers and employees result in organizational comfort. It is then the achievement of organizational comfort that enables high-stakes decision-making. We will in the following discussion delve into how the risk practice is constructed to create this individual comfort, and how it enables subjective judgments to be turned into organizational truths. This will be made using the theoretical framework presented in section 2.3.

5.1. Constructing an operational risk practice as a search for comfort

PensionCap's practice for managing operational risks in private market investments contains various methods for assessing the risks of the counterparty. The three most distinctive features are that the practice is constructed to account for a broad definition of operational risk, it is a collaborative effort with many different actors involved, and it relies on qualitative information and judgments. The first feature implies that the definition of operational risk sets the scope regarding what is to be evaluated in the risk practice. Our observation is that the focus of PensionCap's definition is on people- and process-related operational risks. However, that includes any operational inadequacies that can adversely affect PensionCap, including reputational damages and monetary losses. As such, there is a great number of events and outcomes that PensionCap tries to avoid through its risk practice. As a result, the risk practice is constructed to incorporate assessments of the various areas of operational risks, which requires the involvement of different types of expertise, making it into a collaborative effort, which is the second feature. This also exemplifies the inherent bottom-up approach (Mikes, 2007), building on utilizing the breadth of the organization to circumvent the operational risks both when constructing the risk practice and when carrying it out. The broad involvement further includes both people who consider the low-frequency and high impact and people who consider the high-frequency but less devastating risks (Mikes, 2007).

By involving both people and process-oriented employees the risk practice can evaluate a broad range of risks - from whether the counterparty's reporting will be trustworthy to whether the counterparty's culture limits the risk of scandals. Therefore, the risk practice aims to direct the different types of expertise to different operational risk areas and the combination of each person's assessments is what ultimately makes up the total risk assessment. In our case organization, it also implies that those who objectively might be seen as risk experts are not the ones leading the risk assessment. Rather, PensionCap's

risk practice is constructed with the portfolio manager as the lead, hence an operational manager, of the risk assessment with the assistance of risk-focused internal experts. The fact that the risk practice does not rely on a single risk manager, or a few risk experts, is a peculiar difference to previous studies, which have focused on the crucial role of risk or uncertainty experts to integrate and manage the risk practice (Arena et al., 2010; Hall et al., 2015; Meidall & Kaarbøe, 2017). Rather, integration of the risk practice is made through the fact that the activities, responsibility, and accountability are shared among different types of roles. Thereby, the purposes and uses of the risk practice depend less on risk experts' intentions, and more on what the whole organization strives to accomplish.

The final, and most evident, feature is that it consists solely of qualitative assessments. This differs from the operational risk practices studied by Mikes (2007), which all aimed to produce a risk calculation but differed in their approach to the balance between quantitative and qualitative methods to do this. As with two of Mikes's (2007) case organizations, the PensionCap operational risk practice is process-based and relies uttermost on qualitative assessment and judgments, but in comparison to those, the actors of PensionCap's risk practice do not perform risk mapping to support the qualitative judgments and or to communicate the risk assessment. Rather, the assessment occurs in various internal discussions and interactions without the use of visualizing aids, as with the meeting between the ODD members and the portfolio manager where the answers in the ODDQ are discussed. Even though the meetings are interactive as the risk reviews also found in process-based risk practices (Mikes, 2007), they have a more proactive rather than a reactive approach to the risks that are analyzed. That means that the proactive discussions in PensionCap's risk practice thus have more similar intentions to the discussions surrounding the activity of risk mapping in that they both aim to draw attention to observed risks (Jordan, 2013, 2018).

However, the outcome of PensionCap's risk assessment is not to produce an estimate of the probability and impact of certain risks, nor to quantify or measure risks in any other way. Rather, the actors involved seek to understand and decide whether they are *comfortable* with the counterparty's operational risk. Therefore, we argue that the risk practice can be seen as a strive for comfort, where comfort is a state where PensionCap feels reassured about the investment and the counterparty, which consequently decreases the perceived uncertainty with the decision. Drawing on Pezeu-Massabuau's (2012) concept of comfort as an action, we conceptualize the studied processes as *risk practice as a search for comfort*, viewing the whole process as an *act* of comfort. Though, we also see an alternation between activities and interactions that inflict discomfort and create comfort, just as Gendron et al. (2021). Several activities are performed to expose weaknesses with the counterparty, which is a discomforting action, but when these are dissolved it instead contributes to the creation of comfort. Hence, there is a tension

between inflicting discomfort and seeking comfort *within* the activities that constitute the comfort-seeking risk practice.

So, how come the concept of comfort has not appeared more frequently in previous risk management studies? We argue that comfort is more present and obvious in this specific setting both because it relies completely on qualitative judgments and because it is performed in connection to highly committing and decisive decisions. Quantitative risk calculations are normally more standardized, and calculations can be repeated and compared, over time and between risk assessments (Mikes, 2007). This enables setting up clear limits, as PensionCap also does in their risk control of listed assets, which sets the boundaries for what risk exposure one is willing to accept. However, with qualitative assessments, and especially in alternative assets which vary so significantly from each other, the actual risk level cannot possibly be measured, but it must be assessed by people who in turn also must determine if the risk level is within an acceptable range. Without a clear framework for comparison and guidance, other methods become more important for reaching conclusions that the involved parties can be comfortable with.

5.2. Creating and sharing individual comfort

As mentioned above, PensionCap's operational risk practice is not limited to the organization's risk-focused internal experts. Instead, several actors play an integral part in the practice, where some are involved throughout the process, such as the responsible portfolio manager, whereas others make temporary appearances. Thus, several actors need to "sign off" on the risk practice for a new investment to be approved. This is in line with the argument that it is not enough to be comfortable with one part of the risk practice. In other words, it is not sufficient to *just* be comfortable with the counterparty's people whilst leaving several areas related to processes uncovered. Rather, comfort needs to be created across the many domains of operational risks to finally create a sense of comfort that applies to the whole assessment.

Given that operational risks are inherently "[...] unknowable and incalculable" (Power, 2004, p.3), how is comfort around its manageability created? We argue that comfort is created locally around specific areas of the risk practice and then shared across the practice to produce an overall feeling of comfort. Therefore, the starting point of the creation of comfort begins with the actors making their assessment of the counterparty, using one's experience and knowledge. However, to achieve comfort, the own assessment must be met by discussions and validation from others. Discussions with peers, either direct colleagues or from other parts of the funds were commonly highlighted as key enablers of making sense of the counterparty. In addition, some actors highlighted that they leverage their external network to both make sanity checks of their judgments and collect more information about the counterparty. Thus, we argue that these activities are key enablers of individual comfort creation.

This individual comfort about the risk level can then be transferred to others in the organization. We draw on Pentland's (1993) concept of comfort as a commodity to describe how actors build comfort in an area in which they have limited insight through relying on the comfort of others. As comfort is not a zero-sum game (Pentland, 1993), the collective comfort increases in the organization as it is transferred. We argue that the primary reason an individual seeks to "get" comfort from someone else instead of creating it for themselves is that they lack the required skills or resources. We have identified two main transfers of comfort in PensionCap's risk practice: (1) between the portfolio managers and the members of the ODD team, and (2) between the portfolio managers and the CEO.

The ODD poses one example of the transfer of comfort, as the portfolio manager(s) seeks to gain comfort by consulting the group of internal experts that make up the ODD team. In some situations, this comfort can be created by the fact that the subject expert expresses no discomfort with their respective field. In other cases, it can be created by providing a roadmap to what is needed to become comfortable. However, the ODD is not a one-way street of comfort giving. The ODD also facilitates the transfer of comfort from the portfolio managers to the members of the ODD team by providing them with insights and knowledge about the counterparty which is not included in the ODDQ. Furthermore, making sure that the CEO is comfortable with the risk level of the counterparty is a key condition for the portfolio managers to continue the assessment of new investments. As Pentland (1993) found that senior managers became comfortable through exploring and challenging the comfort of middle managers, we argue that PensionCap's CEO gains comfort through the continuous alignment with the alternative investment teams. In addition, knowing that they need to align the ideas with the CEO serves as a motivator for the portfolio manager to address areas of discomfort. Additionally, it was noticeable that the CEO recognized the benefits of the "formal check" made by the ODD team. In addition to the two examples outlined above, we find an exchange of comfort between the portfolio managers which primarily focuses on confirming the view of the responsible portfolio manager. These exchanges of comfort thereby ensure others are seeing the same thing in the same way and thus confirming the portfolio managers' perception and judgment. Figure 1 below visualizes the transfer of comfort in the organization.

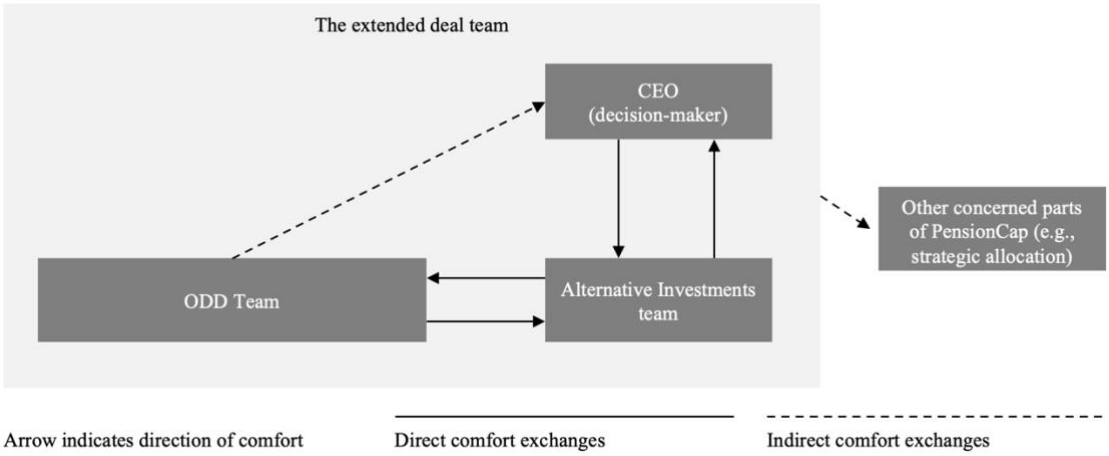

Figure 1. Visualization of the flow of comfort at PensionCap

Our findings differ from Pentland's (1993) with regards to both the direction of comfort transfers and when comfort is created. In his study, comfort flowed upwards in the organization from junior to senior employees. At PensionCap, except for the CEO, the people involved in the operational risk practice had a similar level of seniority. In addition, the engagement teams that Pentland (1993) studied consists of professionals with similar skills whilst the actors we studied represent different areas of expertise. This could be one of the reasons why we see that the flow of comfort is not following the same order, bottom-up, as Pentland (1993). Rather, we observe that comfort flows both horizontally and vertically. In addition, our findings differ from Pentland's (1993) with regards to when comfort is created. In his study, comfort was first created and then transferred. In our study, we find that the discussion enabling the transfer of comfort is a cornerstone of the creation of the comfort that is being transferred. This makes the division of actors into either comfort seekers or comfort givers complicated, contrary to the settings studied by for example Gendron et al. (2021) and Kolcaba & Kolcaba (1991). We argue that actors switch between the role of comfort giver and comfort seeker depending on the area in which comfort is currently being created. The actor with the closest proximity to the area is expected to take on the role of the giver, whilst the actor with the highest potential discomfort (i.e., has the most to lose) assumes the role of the seeker. This means that actors' roles can quickly change if the topic of discussion does. We find it necessary to mention that although we have focused on how comfort is created, discomfort appears to be created and shared in the same way.

5.3. Conditions for reaching organizational comfort

So far, we have established that the risk practice provides conditions for the creation and transfer of comfort. But two questions still need to be answered: how can comfort be turned into a transferable commodity? And what enables the individual comfort to be transformed into organizational comfort? We argue that the two conditions enable this in PensionCap's risk practice: (1) a trust in the organization's people, and (2) a trust in the

overall risk practice. Just as Pentland (1993) highlights that the audit ritual needs to be performed or overseen by the "right" people to be effective, we argue that trust and confidence in the colleague's expertise are critical for the comfort to be accepted as a commodity. We further argue that this trust does not only originates from hiring experienced people, but also from the fact that the actors of the risk practice possess different sets of skills and expertise. The variety in the expertise required to comprehend operational risks also creates an information asymmetry that makes the experts mutually dependent on each other for comfort.

But while Gendron et al. (2021) acknowledge that board members, as comfort seekers, gain their trust in the risk consultant, as comfort givers, by using credible risk management tools, we argue that the *process* in which the employees perform the analysis can be an alternative creator of trust. We further argue that the trust for the process in PensionCap comes from the combination of formal and informal activities being systematically repeated in the risk practice. The knowledge of having a robust and comprehensive procedure brings comfort that the risk level will never be too high. The reliance on ILPA in the creation of the risk practice in its current shape contributes to the trust in the formal activities, as it means they are based on perceived "best practices". A convention from previous research is that the risk function should be independent to remain objective and critical to the operations (Mikes, 2007), and thereby provide trust to the process. At the same time, risk thinking needs to be *embedded* in operations (Mikes, 2007). We argue that the formality of the ODD process enables the achievement of both. The fact that portfolio managers are aware of the recurrently approaching ODD implicitly incorporates the risk assessment into their everyday work. Hence, the ODD becomes present in the mind, but independent in substance.

Furthermore, the informal activities discussed in 4.3.2 become important to manage the ambiguity of operational risks and to compensate for the limitations of the formal activities. A part of the necessity with the informal activities, consisting mostly of interactions with the counterparty, is to overcome insufficiencies in the operational due diligence. Or rather, consider in advance those things that an ODD is not, and will not be, capable of assessing. Closely observing and keeping contact with the counterparty for a long period becomes the next best to measure or directly observe the risk level, which cannot be done with operational risk. The ODD is already an extensive investigation, and even though many interviewees saw room for improvements in the ODD, the most constructive action might not be to rely *more* on that part of the risk practice or to place higher requirements on the counterparty's level of maturity in terms of processes. Placing higher requirements on the processes, routines, and policies that are evaluated in the ODD could even potentially be harmful in the long-term, as it could lead to a "false sense of comfort", as expressed by Portfolio Manager II. Even though it would be possible to create a model that quantifies and in turn simplifies the risk assessment, that is not deemed to be helpful or productive. The same applies to methods that would build on too

simplistic mental shortcuts to guide decisions, such as if the ODD would be too concerned about checking boxes, which is in line with Power's (2009) critique on rule-based risk management. What is deemed desirable is a practice that can strike the balance between pragmatism and breadth of the assessment, that manages to extract *useful* qualitative judgments. In many regards, this is currently achieved through PensionCap's combination of formal and informal activities. As such, we exemplify how a risk management process can be credible also when being exclusively reliant on interactive discussions and meetings, and not only when those attributes act as complements to quantitative risk management tools and models (Kaplan & Mikes, 2016).

We further argue that the fact that activities are *systematic* and *repetitive* is important for establishing trust in the practice and its actors. Abandoning normal procedures injects discomfort into the practice as it entails leaving stones unturned. Focusing on having a repetitive practice instead of customizing the activities to the needs of each investment means that PensionCap risks spending time and resources on activities that do not render a direct value. Although this may be true, we argue that the repetitive nature of the practice enables the organization and the actors involved to find reassurance in following a well-known process. In addition, it enables decision-makers to know that the responsible actors did not take any short-cuts or left areas of discomfort unaddressed. Additionally, the repetitive nature makes it possible for the actors to gradually build up an internal repertoire of benchmarks, with which a new counterparty can be more easily compared.

It is organizational comfort, reached through the buildup and transfer of individual comfort, that enables making investment decisions. This leads us to the second part of our research question; how an operational risk practice can assist decision-making. The risk practice appears to have a very central role in decision-making in our case organization. We argue this is largely explained by the fact that their ability to formally influence the counterparty after the commitment is limited and deciding to commit to a new counterparty is therefore more critical. However, we also argue that it is explained by the fact that the operational managers are investment professionals, and there is a close connection between risk and return within investing in general (Markowitz, 1952). This means the risk practice is not only a part of managerial work – it *is* managerial work, which also speaks for the importance of operational risk in this context. This differs from what is seen in the studies of Hall et al. (2015) and Meidall & Kaarbøe (2017), where there are dedicated risk managers who actively seek to influence decision-making, using either toolmaking or sensegiving. Because of the centrality and integration of the risk assessment in our case organization, there is no need for risk managers to convince or actively influence other managers. Despite the difference in phrasing, both toolmaking and sensegiving are made with the use of tools, even though sensegiving complements these with social interactions (Hall et al., 2015; Meidall & Kaarbøe, 2017). In our case, social interactions and social mechanisms play a much bigger role than technical mechanisms, since what may be classified as tools in this risk practice is not particularly

sophisticated, nor does it have to be. Arena et al. (2010) argued that an effective risk practice benefits from social interactions, but we argue that social interactions can be the *core* of a risk practice. Hence, the risk practice's assistance in decision-making does not come from the active convincing of certain risk managers, nor the usage of specific tools. Rather, it comes from the achievement of organizational comfort in the risk assessment, which builds up from the creation of individual comfort. That leads us to conclude that in a smaller organization where all actors involved in the risk practice are experts within their field, the risk practice is not dependent on technical tools or techniques to be useful or influential.

6. Conclusion

The purpose of this study was to deepen the understanding of operational risk management. The study aimed to answer the question: *How is an operational risk practice constructed and what role does it have in decision-making?* The question was answered by studying a state pension fund's management of operational risk associated with private market investments. These investments, which are less liquid and harder to continuously value than public investments, often rely on external management. As these investments are expected to make up a growing portion of the fund's portfolio going forward, it needs to increasingly engage in partnerships with external managers. These partnerships, which typically exceed ten years, could be described as marriages, alluding to the long-term commitment between the investor and the external managers. Entering these "marriages" implies that the fund is exposing itself to the operational risks of the counterparty. The decision to marry, and with whom, is therefore challenging, but at the same time important for the fund to achieve its strategy. In this study, we focused particularly on what methods are adopted to overcome the many challenges of operational risk, such as the ambiguous definition and inability to measure or calculate operational risk (Power, 2004; Mikes, 2007, 2009). It became evident that the objective of the risk practice is to gain a common comfort, which we call organizational comfort, about the counterparty's risk level. Comfort needs to build across the whole span of operational risk since what matters most is becoming comfortable about the overall picture of the counterparty. Previous literature focusing solely on operational risk is scarce, but we can in general conclude that what is central to the management of operational risks is social interactions rather than technical tools, which tend to be central in the management of other types of risks (Arena et al., 2011; Hall et al., 2015). This paper aims to contribute to the literature on risk management by illustrating how comfort theory can be used to further the understanding of operational risk management. The contribution of this paper is divided into two propositions. Firstly, we propose:

An operational risk practice can create comfort around counterparty risks by constructing the assessment as a collaborative effort between internal experts and decision-makers

This study highlights the importance of accounting for the depth and breadth of knowledge needed to create sufficient comfort around operational risks, which decision-makers can achieve by leveraging the organization's internal experts. In addition to providing expert opinions on certain topics, these experts provide an outsider's view by making temporary appearances in the practice – enabling them to bring new perspectives also outside of their area of expertise. In addition, we argue that the use of internal experts made the practice more legitimate to organizational actors not directly involved in the process. We argue that it is preferable to source these activities from internal rather than external experts as they have a better understanding of the organization and have

established inter-organizational relationships that enable more efficient and constructive discussions. Besides enabling information sharing, the collaborative effort based on continuous horizontal and vertical interactions enables opinions and judgments to be discussed and challenged which supported the discovery and sharing of (dis)comfort. Most importantly, having the practice as a collaborative effort where actors' involvement was largely documented shifted the decision-making paradigm from "I made the decision to invest" to "we as an organization made the decision to invest". This creates a feeling of shared accountability that makes the portfolio manager and the whole organization comfortable with making these long-term commitments. Secondly, we propose:

A substantiated trust in the organization's people and processes turn individual assessments into organizational "truths" that support high-stakes decision-making

The reliance on qualitative judgments puts higher requirements on an organization's ability to dissolve uncertainties and communicate perceptions in a way that decision-makers deem credible. The senior managers' confidence in the people performing the analysis and the process by which this is made is therefore critical for the qualitative judgments to be a support in decision-making. We argue that this trust comes from hiring experienced employees with complementing skills, but also from the repetitiveness of the combination of the formal and informal activities of the risk practice. Additionally, we argue for the value of having informal practices that complement the formal practices as it makes it possible to capture important, yet hard to evaluate, aspects of the counterparty, such as behavior and culture.

Thus, our study gives color to how a risk practice can be both integrated, credible, and influential also without the reliance on dedicated risk experts and development of technical risk management tools. It demonstrates how various activities, to a large extent built on social interactions, can be combined to facilitate the making of qualitative and useful judgments from a diverse group of experts.

Implications – a nuanced perspective on risk management

These conclusions contribute to previous studies by shedding light and bringing a deeper understanding of not only *what* makes up an operational risk practice, but also *how* and *why* it is performed in this way and what aspects are essential for it to be effective and useful for decision-making. The study also demonstrates that it is not only the purely rational or time-efficient methods that contribute to the creation of comfort and that a pragmatic risk assessment must allow also for informal procedures if it contributes to the ability to make decisions. These insights are not only of value to other investment firms. Rather, we argue that understanding how to efficiently manage the operational risks of organizations that one has business-related commitments to is valuable in several common situations in business. Because of the unique setting of our case organization, we argue that our conclusions apply to other qualitatively based risk assessments but also to other risk assessments that are made before a major strategic decision. Examples of

decisions that fit these criteria include long-term commitments in either direction of the value chain, such as supply-chain agreements or commercial partnerships. As such, we hope that this study benefits an array of organizations, not least since it provides an alternative way of looking at risk management by viewing it as a dynamic search for comfort. We argue that this viewpoint enables practitioners to better understand risk categories that do not easily lend themselves to quantitative risk tools.

Limitations – depth over breadth

This study is made with a single-case study which does not provide possibilities to compare and generalize between cases. Even though the single-case study provides a depth that is difficult to obtain with a multiple-case study, the findings are to be seen as indications of characteristics and dynamics of an operational risk practice and need to be supported with further research. We have studied the way an organization evaluates another organization's operational risk, and although we argue that the conclusions from this paper can aid most types of operational risk practices, we expect that the management of an organization's "own" operational risks requires a slightly different approach. Additionally, the risk practice for operational risk in our case organization is closely related and intertwined with the investment process, making it sometimes difficult to separate the commercial and operational assessment. Combined, we believe that this study's conclusions should be seen in the empirical setting in which it was found. Therefore, the findings give indications for operational risk management rather than a general blueprint.

Future research – develop the understanding of comfort and risk management

Further analysis and studying of the phenomenon of operational risk is needed to strengthen and complement the finding of this and previous studies on operational risk management. For example, it would be beneficial to study organizations similar to our case organization to understand similarities and differences with regard to the role of creation and transfer of comfort. Additionally, it would be interesting to examine if the dynamics of the risk practice differ in a larger organization or a non-financial organization. It would also be interesting to understand how operational risk practices matures. The case organization in this paper implemented its operational risk practice a few years ago, and they are still early in their joint experience of investing in these asset classes. That might make the organization more inclined to reach a higher level of comfort before venturing into a decision to invest and compensate for experience with a profound process for risk analysis. Lastly, since the focus of the risk practice is so highly affected by the definition of operational risk, it would be interesting to investigate further the development of this definition, the causes for it, and how that has influenced the management of operational risk.

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8. Appendix

Interview no	Participant(s)	Interview context	Length of interview	Date of interview (all 2022)
1	Head of Risk Control	Online	60min	10th of March
2	***ODD team*** Risk Control CFO Compliance Legal Counsel Sustainability & Governance	At PensionCap's office	90min	11th of March
3	Head of Alternative Investments	Online	60min	17th of March
4	Head of Risk Control	Online	30min	18th of March
5	Portfolio Manager II	Online	60min	23rd of March
6	Portfolio Manager I	Online	60min	23rd of March
7	Head of Risk & Operations	Online	60min	6th of April
8	***General Partners*** General Partner I General Partner II	Online	45min	7th of April
9	Chief Executive Officer	Online	40min	11th of April
10	***Institutional Limited Partners Association*** ILPA I ILPA II	Online	45 min	12th of April
11	Portfolio Manager II	Online	30min	13th of April
12	Portfolio Manager I	Online	30min	19th of April
13	Head of Alternative Investments	Online	30min	20th of April