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Research interests

- Conceptualisation of Risk
- Business Continuity Management
- Community resilience
- Sense makings role in risk assessment
- Safety management systems
- Industrialisation of hard to reach regions

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Making Sense of Risk—A Sociological Perspective on the Management of Risk

Jacob Taarup-Esbensen*

This article describes how risk has been conceptualized in the business and organizational literature through four distinct transformations: from the techno-scientific perspective to the cognitive, the social-cultural, and, finally, to the constructionist perspective. Each domain conceptualizes risk in different ways, as organizations have found it difficult to understand and mitigate using the risk management tools available. Conceptualizing risk as sensemaking becomes relevant due to the complexity of information available to the risk manager, and, coupled with time constraints, this means that risk managers increasingly rely on making sense of possible threats rather than on the accuracy of the information received. This shift presents four contributions to the current literature. First, it suggests that the role of risk management is shifting from being technical in nature to being about risk sensemaking, where the manager engages with the social and physical environment with the aim of acquiring cues that could indicate how future events will unfold. Second, a sensemaking perspective implies a shift in the use of risk management systems from being "containers" of knowledge about past risk events to lending legitimacy to the plausibility of the success of future decisions. Third, the role of the risk manager in managing individual risks changes and becomes one of managing everything using the social networks and systems available as indicators of future risk events. Finally, the risk manager and the systems he or she relies upon are regarded as a source of risk in themselves as both act as gatekeepers for organizational risk decision making.

KEY WORDS: Risk; risk management; sensemaking

1. INTRODUCTION

In 2013, the Danish state released a report on the causes of the financial crisis (Ministry of Industry, Business, and Financial Affairs, 2013). It concluded that the economic impact of the global systemic financial crisis influenced the Danish economy disproportionally and was the result of high levels of optimism that led to real risks being underestimated. The report also concluded that, in Denmark, the financial crisis arose because of interrelated factors including relatively high and seemingly sustainable economic growth, procyclical fiscal policy, procyclical regulation of the financial sector, loose financing terms, risk-seeking credit institutions, and inadequate corporate governance in many financial institutions. Therefore, the committee behind the report recommended that the rules governing the financial sector were to be further tightened and that supervisory oversight should be strengthened. However, the report also noted that "regardless of the regulation and supervisory measures implemented, it will never be possible to completely prevent a new financial crisis from emerging" (Ministry of Industry, Business, and Financial Affairs, 2013, p. 17). In this way, the report acknowledged that rules and regulations will not address the central

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ELSEVIER

Original article

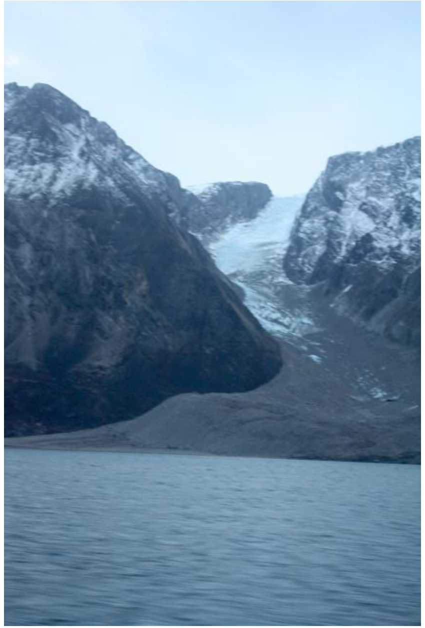
Managing risk through dependency: legitimise business continuity?

Jacob Taarup-Esbensen

1. Introduction

Routledge Taylor & Francis Group

Managing risk and Sustainability in Complex Social and Environmental systems



Why Mining?

High risk industry – Low success rate with high returns

Bebbingtion, 2106

Environmental impact - Significant changes to landscape and Infrastructure

Kalgoorlie, 2016

High Complexity systems with Loose Couplings

Bebbington, 2016

Significant impact – Social and Environmentally

Perth, 2016

Example of the historical legacy of mining

Community impact of failed tailings dams

Mariana dam, 2015

Brumadinho dam, 2019

What is risk?

- Risk is the possibility of an unfortunate occurrence
- Risk is the potential for realization of unwanted, negative consequences of an event
- Risk is exposure to a proposition (e.g. the occurrence of a loss) of which one is uncertain
- Risk is the consequences of the activity and associated uncertainties
- Risk is uncertainty about and severity of the consequences of an activity with respect to something that humans value
- Risk is the occurrences of some specified consequences of the activity and associated uncertainties
- Risk is the deviation from a reference value and associated uncertainties

What is risk?

Table I. Summary of Perspectives on Risk

Techno-Scientific Perspective	Cognitive Perspective	Sociocultural Perspective	Constructionist Perspective
Risk is equal to probability of an unfavorable event	Risk as preexisting and its control is enabled by its cognitive recognition	Risk as incalculable, social, and subject to disputes over its control and who is to blame for its creation	Risk as constructed through the perceived legitimacy of information

Taarup-Esbensen, 2019

Rationel risk behaviorist (Experimental)

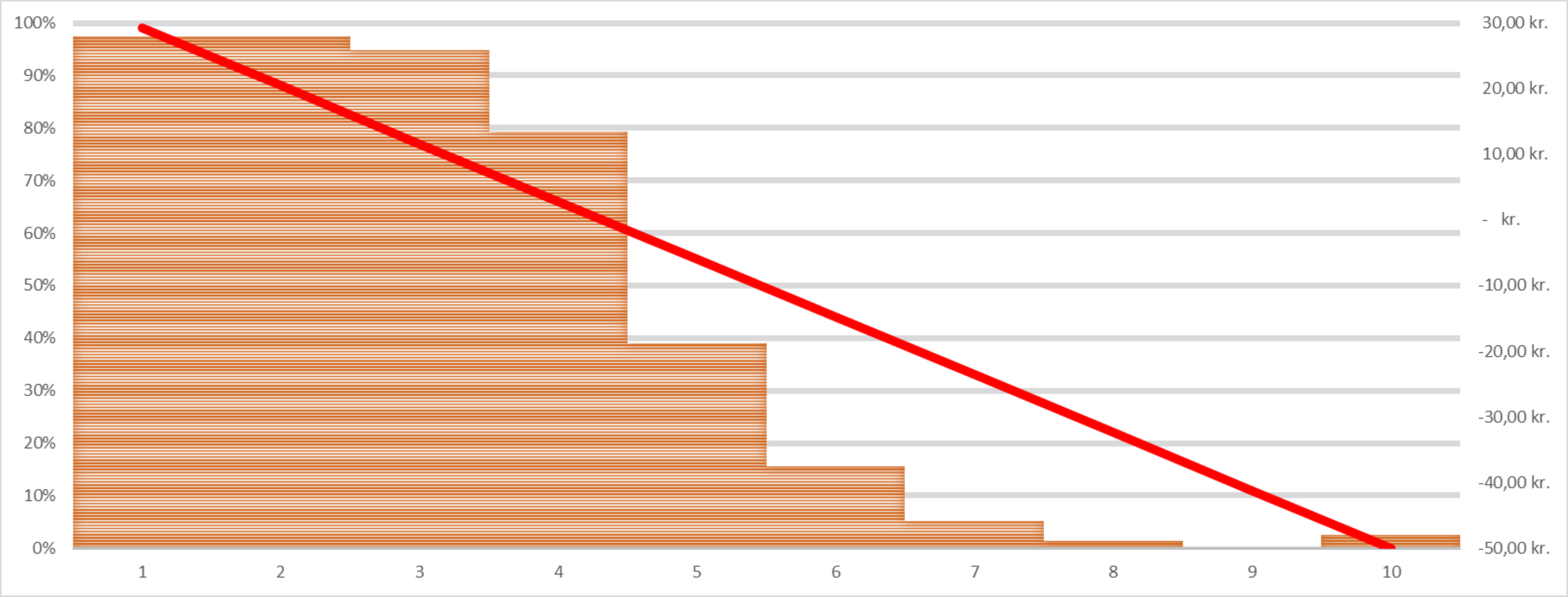
What game will you play?

You need to choose between playing Option A or Option B. The first rows presents you with two choices, Option A, where you have one in ten chance of winning 60 kr. or a nine in ten chance of winning 40 kr. The second, Option B, give you a one in ten chance of winning 110 kr. or nine in ten chance of winning 2 kr.

Option A	Option B	Option A	Option B
1/10 of 60 kr 9/10 of 40 kr.	1/10 of 110 kr, 9/10 of 2 kr.		
2/10 of 60 kr, 8/10 of 40 kr.	2/10 of 110 kr, 8/10 of 2 kr.		
3/10 of 60 kr, 7/10 of 40 kr.	3/10 of 110 kr, 7/10 of 2 kr.		
4/10 of 60 kr, 6/10 of 40 kr.	4/10 of 110 kr, 6/10 of 2 kr.		
5/10 of 60 kr, 5/10 of 40 kr.	5/10 of 110 kr, 5/10 of 2 kr.		
6/10 of 60 kr, 4/10 of 40 kr.	6/10 of 110 kr, 4/10 of 2 kr.		
7/10 of 60 kr, 3/10 of 40 kr.	7/10 of 110 kr, 3/10 of 2 kr.		
8/10 of 60 kr, 2/10 of 40 kr.	8/10 of 110 kr, 2/10 of 2 kr.		
9/10 of 60 kr, 1/10 of 40 kr.	9/10 of 110 kr, 1/10 of 2 kr.		
10/10 of 60 kr, 0/10 of 40 kr.	10/10 of 110 kr, 0/10 of 2 kr.		

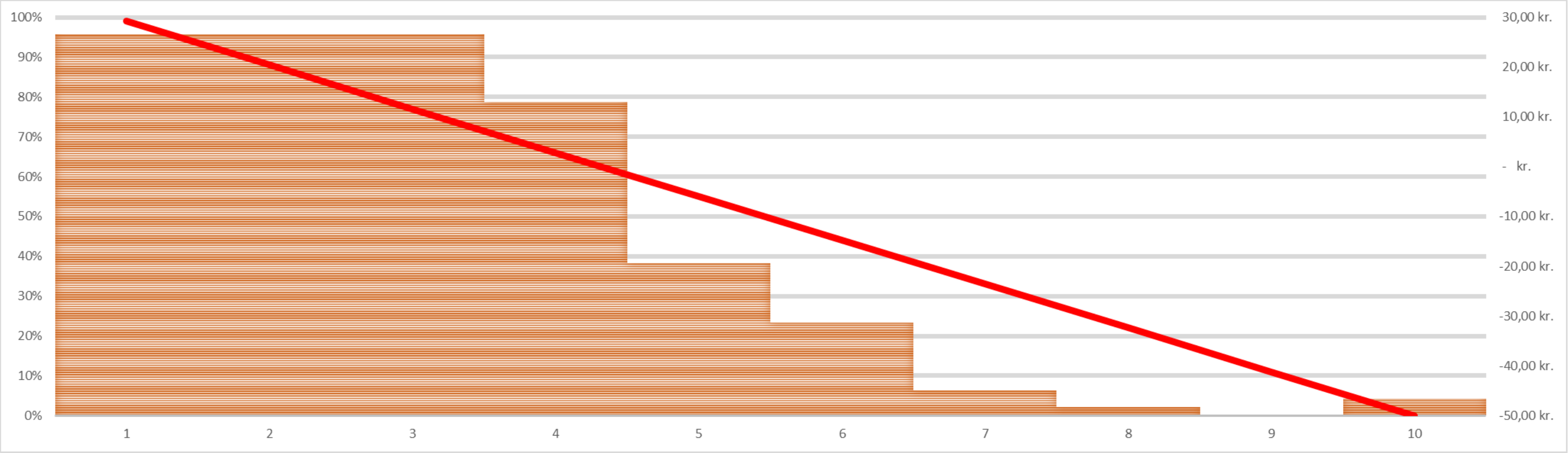
Based on Holt & Laury, 2002

Example of risk aversion among students (Experimental)

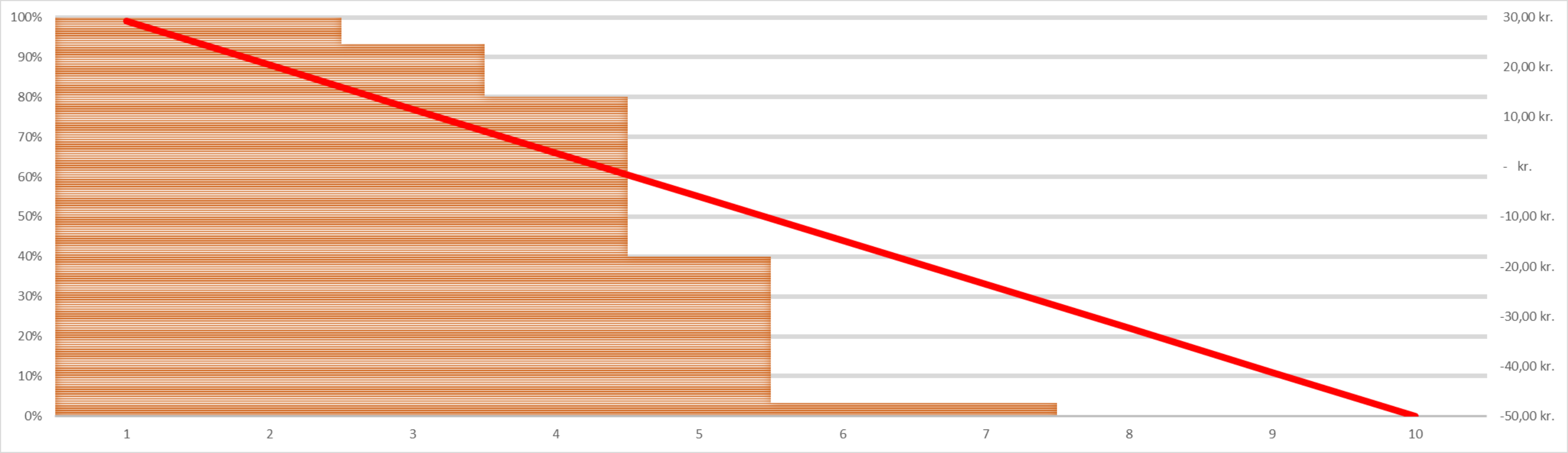


n=77

Differences in Risk aversion / Male population



Differences in Risk aversion / Female population



Complex systems

- Are resilient under dynamic circumstances (can generate multiple solutions and adapt to disturbance)
- A prone to failures under central control
- Are open systems
- Leads to repetitive patterns
- Includes feedback loops

Lessons from failures of complex systems

1. Drift towards failure with goal conflicts
2. Past successes as reason for confidence
3. Fragmented problem solving clouding big picture
4. Failure to revise assessment as new evidence emerges
5. Breakdowns at the boundaries of organisational units

Decker, 2019

Community risk - Complex systems where legitimacy of information is questioned

What is community risk?

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Routledge
Taylor & Francis Group

Check for updates

Communities as a risk in mining: managing community legitimacy

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ABSTRACT

Using three cases from mining multinational enterprises (MNEs) in Armenia, this article conceptualises community risk, providing an alternative framework to conventional risk management approaches when managing local community relations. These approaches have been struggling to capture the increasingly complex risks originating from communities – both those who are directly affected by mining activities and the ones who have a vested interest in mining. The article defines two types of community relations which mining companies manage: communities of place (CofP), who live near the mine and are directly affected by its operations, and communities of interest (CofI), who are outside interest groups either opposing or supporting a given project. Community risks arise when CofP's create meaning about the legitimacy of the changes introduced into their physical and social environment, leading them to take action that affects the MNEs' risk exposure to political, cultural or financial risks. The CofP can present these types of risks by acting alone or in cooperation with the CofI, who often have the resources and knowhow to affect corporate decision-making. The article contributes by defining community risk as an increasingly salient source of uncertainty for mining companies and MNEs in particular. Conceptualising community risk as the lack of legitimacy with these important stakeholder groups enables MNEs to strategise and adopt practices which are adapted to the local context. At the same time it assures investors, political and cultural stakeholders that the communities who have a specific interest in the project accept its impact.

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KEYWORDS
Risk management; legitimacy; community engagement; mining; armenia

1. Introduction

Extractive multinational enterprises (MNEs) have experienced a rise in risks from local communities who pose business continuity uncertainties that they have found challenging to manage (Gifford and Kestler 2008; Mutti et al. 2012). These types of risk have become salient because of globalisation and new technologies, which have provided opportunities to affect events and stakeholders far beyond their confined geographical area (Gifford and Kestler 2008; Kardes et al. 2013). This article proposes a conceptual understanding of community risk, as managed by mining MNEs in Armenia, by answering the research question, what is community risk? The need to conceptualise community risk comes from industry reports and surveys that show that the primary reason mining projects terminate their operations is not due to operational requirements.

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Researching mining

Experiences from practice have shown that communities is a source of risk to business continuity in the mining industry (BSR, 2003; ICMM, 2015)

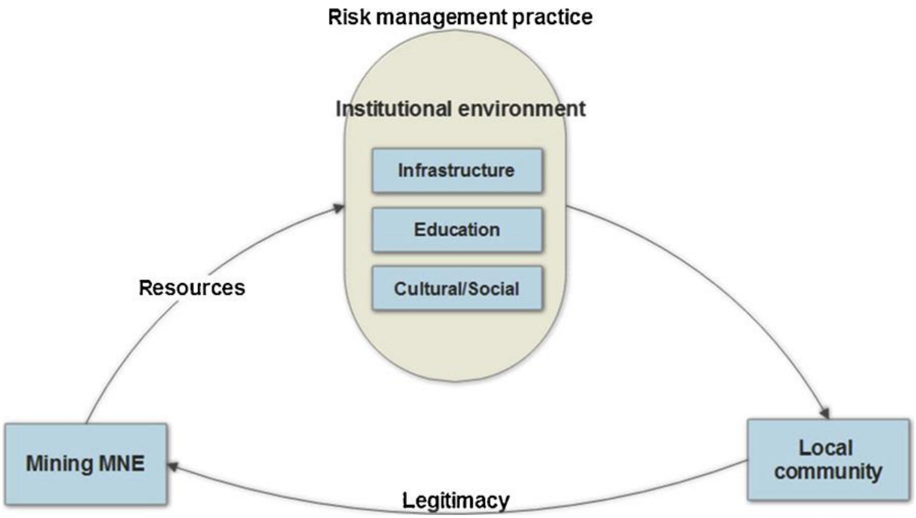
Researchers could document that local communities were a source of risk and influence corporate decision making (Kemp & Owen, 2013; Gratz & Franks, 2015; etc.)

Empirical evidence from field work identified local communities as key stakeholders (Taarup-Esbensen, 2018)

Community risk

The relative chance that organisational activities prompt communities to regard it as illegitimate and instigate a response that jeopardises continued operations.

How mining companies gain legitimacy



Taarup-Esbensen, 2019

NGOs is believed to pose a bigger threat to the multinational mining enterprise (MNE) than the local community because of the organisational and financial resources that they have available to them.

To utilise these resources, they need the legitimacy that comes from the local endorsement.

MNE Response…

1. Investments focused on the operational requirements of the mining MNE, primarily related to local infrastructure, helped MNEs built local community legitimacy.

2. As dependence on the investments grow stronger, it reduced the risk that the local community engage with outside actors and possibly powerful critical NGOs.

Managing Community Legitimacy

Table 1. Community risks.

Community risks	
Political risk	MNE activities affect its legitimacy and subsequent actions taken by communities that affect licencing or ownership structures.
Cultural risk	MNE activities affect its legitimacy and subsequent actions taken by communities that affect its social licence to operate.
Financial risk	MNE activities affect its legitimacy and subsequent actions taken by communities that affect access to investments or impact sales.

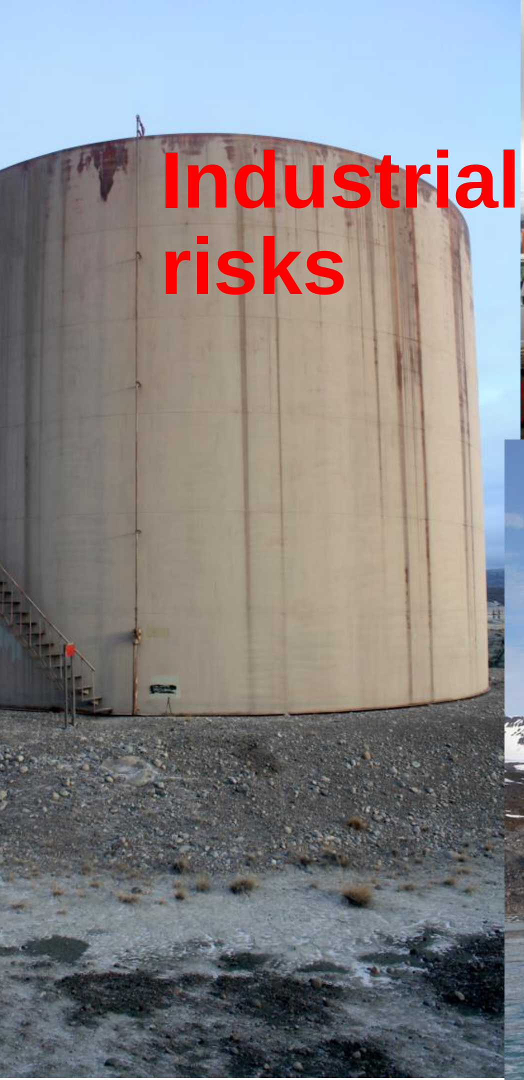
Taarup-Esbensen, 2019

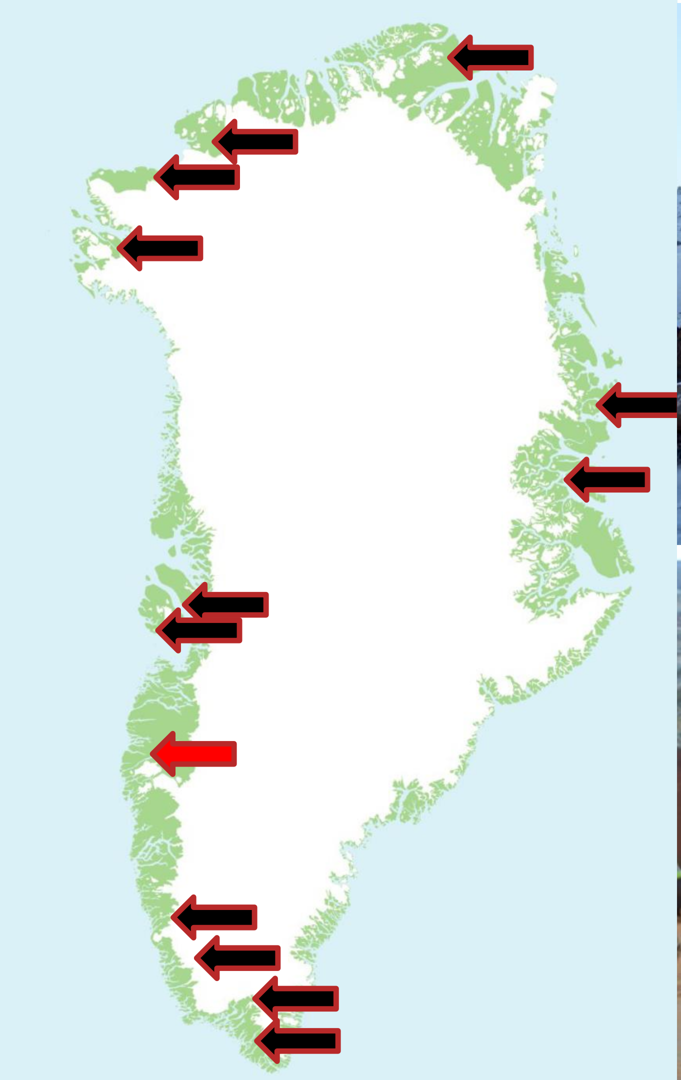
Community risk management

Effective community risk management means…

- Communities become less risk averse
- Willingness to trade short term gains for long term pains
- Building dependencies (couplings) with the company

Industrialisation of the Arctic – Political risks



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What is political risk?

	Government Intervention
Political Risk	· Regulations/taxes/bans on trade, production, investment, sales, withdrawal of funds, etc. · Corporate tax/royalty increases · Back-tax claims or disputed tax claims · Government or public control over operations/board/management · Fines · Bureaucratic/political delays (incl. payment delays) · Grand or petty corruption (incl. MNC-initiated bribes) · Problems related to business climate in general (incl. public services, lack of guarantees) · Intervention/sanction by a foreign government · Other general or industry-wide policy changes · Other intervention/policy change/dispute · Nationalisation, expropriation, or confiscation · Ownership restrictions (incl. forced sale and joint venture demands) · Blocking of investment (temporary or final, including termination of a proposed deal) · Breach/termination/suspension of contract or licence (incl. breach of promise) · Forced or unwanted contract renegotiation/revision/review · Disputed/arbitrary charges, court rulings, or legal process

Political risk in remote regions

Pragmatic Legitimacy	Moral Legitimacy	Cognitive Legitimacy
Is positively associated with an organisation's ability to serve the self-interested calculations of an organisation's salient stakeholders	Is positively associated with the possibility for an organisations' actions to be judged as 'the right thing to do'	Is positively associated with an organisation's ability to be accepted as necessary or inevitable based on some taken-for-granted cultural account

Taarup-Esbensen, 2019 (Forthcoming)

Findings

While enjoying pragmatic legitimacy companies are struggling with both cognitive and moral legitimacy.

Managing political legitimacy, makes it possible for companies to identify signs that their actions are not aligned to the aims of political actors and hence constitutes a potential threat to business continuity.

Thank you