

Taarup-Esbensen, Jacob

Doctoral Thesis

Managing Communities – Mining MNEs' Community Risk Management Practices

PhD Series, No. 14.2018

Provided in Cooperation with:

Copenhagen Business School (CBS)

Suggested Citation: Taarup-Esbensen, Jacob (2018) : Managing Communities – Mining MNEs' Community Risk Management Practices, PhD Series, No. 14.2018, ISBN 9788793579750, Copenhagen Business School (CBS), Frederiksberg, <https://hdl.handle.net/10398/9620>

This Version is available at:

<https://hdl.handle.net/10419/209063>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/3.0/>

COPENHAGEN BUSINESS SCHOOL
SOLBJERG PLADS 3
DK-2000 FREDERIKSBERG
DANMARK

WWW.CBS.DK

ISSN 0906-6934

Print ISBN: 978-87-93579-74-3
Online ISBN: 978-87-93579-75-0

MANAGING COMMUNITIES - MINING MNES' COMMUNITY RISK MANAGEMENT PRACTICES

Jacob Taarup-Esbensen

MANAGING COMMUNITIES - MINING MNES' COMMUNITY RISK MANAGEMENT PRACTICES

Doctoral School of Business and Management

PhD Series 14.2018

CBS  COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

PhD Series 14.2018

**Managing communities –
Mining MNEs' community risk management practices**

**By
Jacob Taarup-Esbensen**

Supervisors:

**Associate Professor Michael Wendelboe Hansen
Institute of Management, Society and Communication / Centre for Business and
Development**

**Professor Hans Krause Hansen
Institute of Management, Society and Communication / Centre for Business and
Development**

**Doctoral School of Organisation and Management Studies
Copenhagen Business School**

Jacob Taarup-Esbensen
Managing communities – Mining MNEs'
community risk management practices

1st edition 2018
PhD Series 14.2018

© Jacob Taarup-Esbensen

ISSN 0906-6934
Print ISBN: 978-87-93579-74-3
Online ISBN: 978-87-93579-75-0

The Doctoral School of Business and Management is an active national and international research environment at CBS for research degree students who deal with economics and management at business, industry and country level in a theoretical and empirical manner.

All rights reserved.
No parts of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without permission in writing from the publisher.

Acknowledgements

To Ditte, Silas and Noah – who bear with me despite my many faults.

There are many people to thank for this project and no doubt some have not received the praise that they deserved. Working since 2013 on this project, I have had numerous friends, both old and new, including some I didn't know I had, helping me and supporting the idea of doing research on mining companies in Armenia.

I would like to express my sincere gratitude and appreciation to the following. At Copenhagen Business School, thank you to my two supervisors Michael Wendelboe Hansen and Hans Krause Hansen, who have asked me difficult questions along the way, which has not only been challenging but has also provided me and the project with a clear direction. Also a special thanks to my colleagues and friends at the Institute of Management, Society and Communication, who have watched over my academic development and encouraged me to be creative and take risks. Thank you to my fellow PhD students, who are the only ones who really know the struggle it takes and the price paid to complete the task. Thank you to my Armenian friends, the Ambassador of the Republic of Armenia to the Kingdom of Denmark and Norway, H. E. Hrachya Aghajanyan, Tatevik Revazian, Anna Shahnazaryan, representatives of the Armenian government, the many unnamed villages, the village heads and the mayors in the cities and small mining towns I have visited in the past three years. Not least, thanks to Suren Movsisyan, my friend and the co-author of one of the papers, who has been a beacon of optimism and positive energy throughout the process.

Also, the people who have dedicated their professional life to mining and natural resource extraction in Armenia deserve a special thank you, as they let me visit their offices and production sites, providing me with unique insights into the extractive industry's inner workings. ErhvervsAkademi Sjælland also deserve a special note, as they supported the project despite doubts about the practical application and results of the project. Poul Faarup and Jens Lautrup Nørgaard took on some organisational battles on my behalf to make room for the project to develop and unfold as the years passed.

Jacob Taarup-Esbensen

Frederiksberg, 2017

English summary

This PhD reflects the effort to close a gap in the multinational enterprise (MNE) risk management literature on the identification and mitigation of risk arising from local communities. Small villages and towns that are situated geographically close to the MNEs' place of operation have increasingly been identified as a source of risk (BSR, 2003; ICM, 2015). The mining industry is one of the most exposed to risks from local communities, where there historically have been many conflicts between mine owners on one side and the people living close to the mine on the other (Godoy, 1985; Hoskin, 1912; Lynch, 2002; Morris, et al., 2012). And with access to new communication technologies, it is possible for even the remotest communities to communicate effectively to a wide global audience, enabling non-governmental organisations, politicians, investors and other civil society actors access to up-to-date information about mining MNE operations. This improved outreach has meant that mines have been closed due to conflicts with local communities and therefore a need has arisen for MNEs to implement management practices that can effectively mitigate these types of risks.

Taking the Armenian mining industry as its starting point the thesis seeks to answer the research question: How do mining MNEs manage community risk in Armenia? Subsequently the Ph.D. contributions to the MNE risk management literature within four areas, firstly, by its conceptualisation of risk as sensemaking, where it is the conceptualisation of threats and opportunities that are determining factors in both risk management and perception of risk exposure. Secondly, the thesis conceptualises local communities as communities of place which are socially or physically affected by mining projects, and civil society and other interest organisations as communities of interest, representing two forms of community that have goals that can be both aligned and contradictory. By explaining the relationship between the two forms of community and the mining MNE, the thesis contributes to the MNE literature by presenting the mechanisms that determine how they interact and how possible risks materialise. Thirdly, the thesis shows how communities of place present risks to the mining MNE by applying its resources to financial, political or cultural actors, either directly or by partnering with communities of interest. And finally, knowing that MNEs are outsiders to the local context, the thesis presents the management practices that these companies utilise to mitigate community risks, both in the initial planning and construction phases as well as when the project matures.

There is no doubt that mining operations affect communities of place in a wide range of ways and that some of these impacts will elicit reactions that can, in turn, threaten business continuity (Franks et al., 2014; Harvey, 2014; Kemp & Owen, 2013; Labonne, 1999). The PhD

takes the mining MNE as its focal point, beginning by conceptualising risk from a sociological perspective and examining how risk managers make sense of the risks that they face when dealing with possible community risks. Following this, local communities are conceptualised as communities of place, being located geographically close to mining MNEs' site of operations and affected both socially and physically by its activities. Communities of place evaluate both the opportunities and the risks involved when confronted by the changes that come with mining activities and can in this way both present a risk, if they decide to take direct action against the company, and an ally, as they can support and thereby legitimise the actions of the mining MNE. In contrast to these communities stand communities of interest, who are not directly impacted by mining activities and who evaluate the project as either a risk, as is often the case with critical NGOs, or an opportunity, in cases where lobbies or special interest organisations in support of mining make their voices heard. Through desk research, interviews and fieldwork in Armenia, the thesis investigates how mining MNEs in practice manage the relationship with communities of place, what management strategies they deploy, and the mechanisms that are at work when they succeed or fail. Nine MNEs in total were included in the study, which made up all the foreign mining companies in the country at the time. Fifty interviews were conducted over a period of two years, including interviews with mining MNE managers, members of communities of place and communities of interest, and with experts and government officials. The responses were supplemented by site visits and observations in all the nearby villages and towns, as well as the majority of mining operations.

The findings show that communities of place can be regarded as a unique source of risk and that mining MNEs target these specifically. Community risk arises when communities apply their resources and thereby subject the mining MNE to risk. Communities of place can either apply these resources directly in order to elicit financial, political or cultural actors who can subject the mining MNE to risks, or by partnering with communities of interest who have resources and knowledge available to them. The mining MNEs manage community risks by allocating resources that increase the reliance of communities of place on the mine—for example, by hiring local staff and supervisors, thereby displaying a localisation strategy; building capacity by providing incentives and financially supporting local businesses; constructing infrastructure such as roads; providing electricity and gas; investing in socially and culturally activities; and, finally, supporting different forms of educational institution from kindergarten to providing university scholarships. The result is that the communities of place increasingly regard the mining MNE as legitimate and become reliant on the physical and social

benefits that come with mining activities. In turn, this makes it difficult for more critical communities of interest to gain access and get support from communities of place when leveraging their claims against the company. Subsequently, being regarded as legitimate by this key stakeholder group can mitigate much more hard-to-manage political, country and financial risks that communities of place have the resources to leverage.

Dansk resumé

Mineindustriens og civilsamfundets aktører har identificeret risiko fra lokalsamfund som en kilde til øget usikkerhed og i flere tilfælde årsagen til, at mine-projekter stoppes (BSR, 2003; ICMM, 2015). Denne ph.d.-afhandling afspejler et forsøg på at lukke det hul, som er opstået i den del af international business litteraturen, der omhandler multinationale virksomheders (MNV'ers) håndtering af risiko fra lokalsamfundet. Naturressourceindustrien og specielt inden for minedrift er denne type af risici interessante, da der historisk set har været mange konflikter mellem mineejere og det omkringliggende samfund (Godoy, 1985; Hoskin, 1912; Lynch, 2002; Morris, et al, 2012). Adgangen til nye kommunikationsteknologier har gjort det muligt for selv de mest isolerede lokalsamfund at kommunikere effektivt til et bredt globalt publikum. Herved kan ikke-statslige organisationer (NGOer), politikere, investorer og andre civilsamfundsaktører få adgang til opdateret information om hændelser ved mine-operationer indenfor meget kort tid. Kombinationen af mere tilgængelig information og muligheden for at påvirke driften har betydet, at mineoperatører i stigende grad koncentrerer sig om lokale interessenter, og der er et behov for, at MNV'er engagerer sig i ledelsespraksisser, der effektivt kan begrænse disse typer af potentielle risici.

Med udgangspunkt i MNVer indenfor mineindustrien i Armenien bidrager denne ph.d.-afhandling til forståelsen af disse virksomheders relation til det omkringliggende samfund ved at besvare forskningsspørgsmålet: Hvilken ledelsespraksis gør MNVer i den armenske mineindustri brug af, når de håndterer lokalsamfundsrisiko? Afhandlingen bidrager efterfølgende til MNV risiko litteraturen indenfor fire områder. For det første til konceptualiseringen af risiko som en proces, der sker igennem meningsdannelse og derved en forståelse af risiko som begivenheder, der kan forstås uafhængigt af kontekst og forhistorie. Her er det den individuelle konceptualisering af trusler og muligheder, der er den afgørende faktor i både risikostyring og risikoforståelse og ikke nødvendigvis den enkelte ændring i normaltilstanden, som er afgørende for forståelsen af en evt. fare. For det andet definerer afhandlingen lokalsamfund som 'Communities of place' som en gruppe, der er direkte berørt af den lokale mine, og som evaluerer både fordele og ulemper ved denne påvirkning. NGOer og andre interesseorganisationer defineres som 'Communities of interest', der repræsenterer enten fordelene eller ulemperne ved at have minedrift. Ved at forklare forholdet mellem de to 'communities' og MNV'en bidrager ph.d.-afhandlingen ved at præsentere de mekanismer, der har indflydelse på, hvordan de to interagerer og de mulige risici, der kan opstå. For det tredje vises hvordan 'Communities of place', enten alene eller igennem partnerskaber med

'Communities of interest', kan motivere magtfulde økonomiske, politiske og kulturelle aktører til at interessere sig for og udøve deres indflydelse på virksomheden. Herved kan MNVen komme under betydeligt pres, når investorer truer med at trække deres finansiering og licenser, der ellers er givet, tilbage, eller projektet mister opbakning i resten af befolkningen. For det fjerde præsenterer afhandlingen den ledelsespraksis, som MNV'er gør brug af for at begrænse disse lokalforankrede risici. Her vises det, hvordan virksomhederne investerer i infrastruktur som veje og elektricitet eller i institutioner, så som børnehaver eller sundhedshuse, der er vigtige for lokalsamfundet. Herved opstår der et afhængighedsforhold mellem lokalsamfundet og eksistens af den lokale mine.

Der er ingen tvivl om, at minedrift påvirker lokalsamfund på mange forskellige måder, og at nogle af disse påvirkninger vil fremkalde reaktioner, som kan true MNV'ernes evne til at drive deres forretning (Franks et al., 2014; Harvey, 2014; Kemp & Owen, 2013; Labonne, 1999). Ph.d.-afhandlingen tager udgangspunkt i et sociologisk risiko perspektiv og undersøger, hvordan risikostyring bedrives, når MNVer står overfor risici, der har et omdrejningspunkt omkring de lokalsamfund, hvori de opererer. Som beskrevet defineres lokalsamfund som 'Communities of place', som ligger geografisk tæt på MNVens mine og er både socialt og fysisk påvirket af dens aktiviteter. Når det kommer til den økonomiske, sociale og miljømæssige påvirkning vurderer 'Communities of place' både muligheder og ulemper, der er forbundet med driften af minen. De kan på denne måde både udgøre en risiko, hvis de beslutter at tage direkte skridt mod selskabet eller en ressource, når eller hvis de vælger at støtte projektet. 'Communities of place' kan være medvirkende til at legitimere minedriftens aktiviteter overfor andre aktører i det omkringliggende samfund og kan derved bidrage med en betydelig støtte i argumentationen for den lokale mine. I modsætning til 'Communitis of place' finder vi 'communities of interest', der ikke er direkte påvirket af minedriften, men som på baggrund af deres raison d'être har en interesse i mineprojekter. Disse 'Communities of interest' vurderer mineprojekter som enten en risiko, som det ofte er tilfældet med kritiske NGO'er eller en mulighed i tilfælde hvor lobbyer eller interesseorganisationer, som støtter minedrift, er involveret.

Gennem interviews og feltarbejde i Armenien undersøger afhandlingen, hvordan mine-MNVerne i praksis styrer forholdet til lokalsamfund, hvilke ledelsespraksisser de implementerer, og de mekanismer, der er i spil, når de enten lykkes eller fejler i at reducere lokalbefolkningsrisiko. Studiet inkluderer ni forskellige MNV'er, hvilket udgjorde alle udenlandske mineselskaber i landet. Der blev foretaget halvtreds interviews over en periode på

to år, herunder interviews med minedirektører, minespecialister, medlemmer af 'Communities of place' og 'Communities of interest' samt med industrieksperter og armenske embedsmænd. Interviewsne blev suppleret med besøg og observationer i alle de landsbyer og byer, der ligger i nærheden af miner drevet af MNV'er, samt størstedelen af mine-MNV'ernes operationer.

Resultaterne viser, at lokalsamfund kan betragtes som en unik kilde til risiko, og at MNV'ernes risikostyringspraksis målrettes specifikt til denne gruppe. Lokalsamfundsrisiko opstår, når 'Communities of place' anvender deres ressourcer til at yde indflydelse på den lokale mine og dens aktiviteter. De kan enten anvende deres egne ressourcer direkte eller ved at samarbejde med 'Communities of interest', der har flere ressourcer og viden til rådighed. Formål med denne ressource tilførsel er, at den nærliggende mine-MNV bliver eksponeret overfor økonomiske, politiske eller kulturelle aktører, der kan bruge deres indflydelse, og derved udgør en risiko for selskabet. Mine-MNV'erne forvalter lokalsamfundsrisiko ved at tildele ressourcer, som øger 'Communities of place' afhængighed af selskabet og den lokale mine. Dette sker for eksempel ved at ansætte lokal arbejdskraft og mellemledere igennem en lokaliseringsstrategi eller igennem kapacitetsopbygning ved at give incitamenter og økonomisk støtte til lokale virksomheder. Andre praksisser støtter op omkring det institutionelle miljø f.eks. igennem konstruktionen af infrastruktur såsom veje, forsyning af elektricitet og gas eller investeringer i sociale og kulturelle aktiviteter. Disse praksisser kan også inkludere finansiering af forskellige former for uddannelsesinstitutioner og børnehaver til at yde økonomisk støtte til universitetsstipendier. Resultatet af denne ressourcetilgang er, at 'Communities of place' i stigende grad betragter mine-MNV'en som legitim, og at de bliver afhængige af de fysiske og sociale fordele, der kommer med minedriften. Dette gør det vanskeligt for flere kritiske 'Communities of interest' at få støtte fra 'communities of place', når de ønsker at presse virksomheden til at ændre adfærd. I det modsatte fald kan støtte fra 'Communities of place' og en efterfølgende legitimering af de handlinger, som 'Communities of interest' foretager sig betyde, at magtfulde finansielle, politiske og kulturelle aktører kan blive involveret og derved øge risikoen for, at virksomheden må ændre adfærd.

Managing communities – Mining MNEs’ community risk management practices

1	Introduction to the PhD thesis	13
1.1	Introduction	13
1.1.1	Risk management.....	14
1.1.2	Institutions, legitimacy and risk.....	15
1.1.3	Communities, risk and the construction of meaning.....	15
1.1.4	Armenia and the mining industry.....	16
1.2	Research question and content of the thesis.....	19
1.3	Conceptualisation: Theoretical dimensions of the thesis	21
1.3.1	Risk and risk as sensemaking.....	22
1.3.2	The role of tacit and explicit knowledge in sensemaking	26
1.3.3	Community risk and the multinational enterprise risk management literature.....	28
1.3.4	Local communities as communities of place.....	30
1.3.5	Community risk and mining MNEs	37
1.3.6	Model and theoretical conceptualisation of community risk management.....	41
1.3.7	Summary	42
1.4	Methodology and methods.....	43
1.4.1	Method and data collection	45
1.4.1.1	Archival data collection	46
1.4.1.2	Using an exploratory approach.....	48
1.4.1.3	Planning of fieldwork.....	48
1.4.1.4	Accessing “hard to reach” places.....	49
1.4.1.5	Respondents and structure of semi-structured interviews	51
1.4.1.6	Use of observations.....	57
1.4.1.7	Limitations in the data collection process.....	57
1.4.1.8	Development of coding schema and thematic coding	58
1.4.2	Summary	62
1.4.3	Philosophy of science	62
1.4.3.1	Critical realism as philosophy of science.....	64
1.4.3.2	The multiple case study design.....	68
1.4.3.3	Applying the methodological framework	69
1.4.3.4	Critical assessment of methods and philosophy of science	72
1.5	Findings.....	73
1.5.1	Cross-cutting summary and implications	77
1.6	Contribution.....	80
1.7	Model for mining MNE community risk management	84
1.8	Conclusion	87
1.9	References.....	88
2	From risk management to risk plausibility: Conceptualising risk as sensemaking ..	102
2.1	Abstract.....	102
2.2	Introduction	103
2.3	Conceptualising risk.....	105
2.4	Functional perspective.....	107
2.5	Cognitive perspective.....	108
2.6	Sociocultural perspective	110
2.7	Constructionist perspective and risk as sensemaking.....	112
2.8	Conclusion and discussion	118
2.9	References.....	121
3	Making sense of community risk: Mining MNEs in Armenia managing community relations.....	125
3.1	Abstract.....	125

3.2	Introduction	126
3.3	Theory	127
3.3.1	Communities of place and communities of interest.....	127
3.3.2	Conceptualising risk	129
3.3.3	Community risk.....	131
3.4	Multinationals and community risk	132
3.5	Method	134
3.6	Two cases about the mitigation of community risk	135
3.6.1	Case: Raising dust	135
3.6.2	Case: Taking care of the forest.....	137
3.7	Conclusion and contribution	140
3.8	References	142
4	MNE risk management of community risk: Experiences from Armenia	147
4.1	Abstract	147
4.2	Introduction	148
4.3	Theory: International business perspectives on risk management	149
4.3.1	Financial risk.....	149
4.3.2	Political risk.....	150
4.3.3	Cultural and country risk.....	151
4.3.4	Community risk.....	152
4.4	MNE risk management strategies through legitimacy-seeking mitigation	153
4.5	Method	156
4.6	Analysis: The MNE approach to risk management in Armenian mining	158
4.7	Managing financial risk	159
4.8	Managing political risk	161
4.9	Managing cultural and country risk	163
4.10	Managing community risk	165
4.11	Implications for the MNE risk management literature	168
4.12	References	170
5	Community risk management by mining MNEs: Managing local communities in Armenian mining	176
5.1	Abstract	176
5.2	Introduction	177
5.3	Theory: An MNE perspective on community risk	179
5.4	Method	182
5.5	Community risk - Mining MNE impact on communities of place	186
5.6	Risk management practices as allocation of resources	189
5.7	Conclusions and discussion	192
5.8	Revised model	194
5.9	Contribution	195
5.10	References	197
6	Mining MNEs strengthening local institutions to legitimise business continuity: Experiences from Armenia	202
6.1	Abstract	202
6.2	Introduction	203
6.3	Theory: Dealing with the institutional environment	204
6.4	Operating in a weak institutional environment	206
6.5	Community risk	207
6.6	Method and analytical framework	209
6.7	Analysis: The institutional environment and the Armenian mining sector	210

6.8	MNE investments in local institutions	218
6.8.1	Investing in education.....	218
6.8.2	Investing in infrastructure.....	220
6.8.3	Investing in culture	222
6.8.4	Other types of institutional support	224
6.9	MNE strategy and legitimacy	224
6.10	Findings.....	229
6.11	Updated model.....	230
6.12	Conclusion and contribution.....	231
6.13	References.....	233
7	Appendix	238
7.1	Interview Guide.....	238
7.2	Transcribed Interview	241
7.3	Coding example.....	254
7.4	List of interview respondents.....	260
7.5	Examples of observations findings	265
7.6	Villages and towns	273
7.7	The Multinationals	274

1 Introduction to the PhD thesis

The goals of a multinational can be classified into three broad categories. The firm must achieve efficiency in its current activities; it must manage the risks that it assumes in carrying out those activities; and it must develop internal learning capabilities so as to be able to innovate and adapt to future changes (Ghoshal, 1987, p. 427).

1.1 Introduction

One of the main contributions of the international business (IB) literature has been to demonstrate how multinational enterprises (MNEs) manage uncertainties in their business environment, or the liabilities of being an outsider (Hymer, 1976; Johanson & Vahlne, 2009; Lou, 2009; Zaheer, 1995). Systems and methods have been developed with the aim of identifying and possibly mitigating the risks that MNEs face when doing business on foreign soil (Figueira-de-Lemos et al., 2010; Henisz & Zelner, 2010; Lamin & Livanis, 2013). However, the predominantly national or country-focused approach of the MNE risk management literature can be criticised as being too simplistic. The primary concern is that the literature does not provide explanations for the local risk events occurring both endogenously and exogenously to MNEs near their place of production (Hagigi & Sivakumar, 2009; Shenkar, 2001; Zaheer et al., 2012). By keeping the analysis at a national level, its usefulness in explaining specific actions by key stakeholders, grounded in financial, political or cultural differences, is limited. Contemporary MNE risk management literature has been struggling to create a meaningful theoretical framework which can broaden our understanding of the way that very localised events can have impacts far beyond their geographical setting. In addition to this gap in the literature and empirical conceptualisation of local risk events in the MNE literature, the introduction of new forms of communication technology and subsequent interconnectivity between multiple stakeholder groups has meant that MNEs have to handle an increasingly complex business environment (Brennan et al., 2013; Harvey, 2014; McDonell, 2015).

Faced with risk events, even at a local community level, these national level approaches to understanding and mitigating the “liability of outsidership” (Johanson & Vahlne, 2009, p. 1411) are insufficient in providing an explanatory framework for researchers and the focus of the research in this thesis. As local communities pose an increasing salient level of risk to business continuity (Gifford & Kestler, 2008; Kemp & Owen, 2013; Prno & Slocombe, 2014), there is a need for new insights into how MNEs manage community risks beyond the national level focus provided in the MNE risk management literature. The aim of this PhD thesis is hence to close

the gap in the national-level risk focus of contemporary MNE risk management research by investigating how companies manage sub-national level risks originating from local communities, using cases from MNEs operating in the Armenian mining sector to identify the mechanism that can describe how these companies manage community risk. Figure 1 provides a basic illustration of the dimensions that make up the PhD thesis, describing how local communities pose risks to multinational enterprise business continuity and the management practices that these corporations deploy in order to mitigate these risks within the Armenian context.

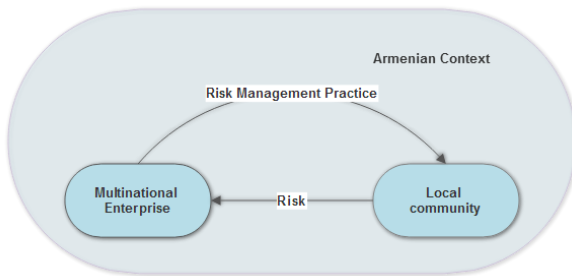


Figure 1. Dimensions of the PhD Thesis

1.1.1 Risk management

Effective risk management is a central and indistinguishable part of all a firm's core activities, whether domestic or international (see Chapter Two). Managing risks is about mitigating events that can be a threat to business continuity (Kot & Dragon, 2015; Lupton, 2013; Miller, 1992). There is no accepted standard definition of risk because the conceptual understanding of risk has changed and developed over time; however, there is agreement that it involves the chance of a loss of value that a given organisation either possesses or wants to acquire. Although it is difficult to come up with a universal definition, most agree that without the proper management of risk, firms will soon find themselves in trouble and miss opportunities for growth. Risk management has thus found its way into every business activity, from the individual employee working with systems and pre-set standards to the members of the board. This development applies to all firms around the globe, but even more so to MNEs, who not only have to manage risks in the local business environment to which they are accustomed, but have to balance risks involving multiple entities.

1.1.2 Institutions, legitimacy and risk

Kostova and Zaheer (1999) provided a framework for conceptualising how MNEs enter and remain in an institutional environment that was foreign to them and thereby manage risk by being regarded as legitimate. They differentiated between two forms of legitimacy: first, the MNE needs to adapt in order to overcome entry barriers and gain access to a market; second, there is a need for cultural adaptation that will ensure that it is accepted in the social environment where it is operating. The aim of the MNE, in this perspective, is not only to gain legitimacy when overcoming entry barriers but also to retain its legitimacy with different communities in the host country. Firms, including MNEs, have traditionally handled risks through the use of systems and standards, and have focused on making “accurate” measurements of the social world (Power, 2004). While this is not a defect in itself, this approach does involve a loss of complexity and individualism, which can result in a preoccupation with the accuracy of measurements rather than with the risk event itself (Lupton, 2013; Mikes, 2011). Not comprehending this complexity on the local level can result in a loss of legitimacy as gaps emerge between the expectations of the people who are affected by the MNE’s activities and what the company regards as potential threats. For MNEs that have activities in multiple business environments, these systems and standards become increasingly complex, and lack consistency as a tool for risk management decisions and mitigation when applied in many different cultural settings. This is especially true in institutional environments where the enforcement of regulations is arbitrary and therefore lacks transparency—i.e., emerging markets (Khanna & Palepu, 1997; Meyer et al., 2009). These types of institutional settings—also called weak institutional environments or institutional voids—increase the complexity that the MNE faces and therefore make it challenging to anticipate and manage risks, especially on a local community level (see Chapter Six).

1.1.3 Communities, risk and the construction of meaning

As will be discussed in detail later (Chapter Three), it is possible to divide local communities into two distinct groups: “communities of place,” which are geographically located close to corporate facilities or operations and both socially and physically affected its activities, and “communities of interest,” which are advocacy groups that share a common purpose or mission that binds them together (Calvano, 2008; Franks & Cohen, 2012). In communities of place, decision-making is based on how individuals relate to the community that they are a part of: members of the community thus negotiate among themselves about how to handle changes

in their social and physical environment, in this case brought about by the mining activities. Here, traditional risk management is infinitely more complex and lacks a sense of consistency, at least from a systems perspective, as decisions are made and subsequently changed seemingly at will. As communities are in a constant state of negotiation about what is real, they are also prone to change their mind about previous decisions when presented with what is to them “new” information. Traditional risk management systems, based on a cause-and-effect orthodoxy, are simply not equipped to handle these forms of inconsistency, regardless of whether or not this “new” information is objectively true. Sensemaking (Weick, 2001) is in this perspective central to the understanding of how meaning is created and how people subsequently take action on the risks that they believe they are exposed to (see Chapter Two and Three). It is not necessarily the objectively definable dangers communities of place are exposed to that determine how they react or the reaction of the MNE risk manager, but rather their perception of how changes to their physical and social environment will affect their lives.

All the different aspects of MNE risk management can be witnessed within the Armenian mining sector. In a combination of operating in an emerging market, weak institutions, lack of or rudimentary services and the close proximity of mining activities makes up a high-risk environment for both the companies and local population. As this thesis will show are mining MNEs, despite these challenges, successful in managing these uncertainties and not least risks from communities of place directly being affected by mining activities.

1.1.4 Armenia and the mining industry

Armenia is an ideal setting for studying community risks as it provides an ideal setting where a combination of contextual factors and company specific mechanisms influence corporate risk management behaviour. As with many of the countries that were part of the Soviet Union, the transition process to a market-based economy was extremely challenging and was mixed with armed conflict, political unrest, organised crime and enormous changes in trade (Chobanyan & Leigh, 2006; De Waal, 2003; Kambeck & Ghazaryan, 2013). The fast—and to some degree uncontrolled— economic development had a significant impact on social conditions, spurring inequality and poverty from which the country continues to suffer. To this day, more than 32% of the population is still characterised as living in poverty, which shows that even after a prolonged period of economic development, there are serious political and economic challenges (Armstat Income of Population, 2014; UNDP, 2013). After a shaky start to its market-based economy following independence, and the war with neighbouring Azerbaijan

ending in 1994, there was a period when Armenia witnessed a significant increase in economic growth that meant, at one point, that the country was dubbed the "Caucasus tiger" by the World Bank (World Bank, 2007). The rapid economic development was primarily fuelled by a significant diamond-cutting industry. Uncut diamonds were imported mainly from Russia and re-exported as cut, or more refined, jewellery-mounted finished products. The majority of finished products were exported to Europe and the United States. The diamond business collapsed in 2008, however, and today the core economy is based on metal ore, agriculture, beverages (brandy) and some energy exports, mainly to Iran (Economist, 2015b; World Bank, 2015).

The Armenian diaspora is an important stakeholder group when it comes to creating a more diversified economy, in terms of both its economic and political effect. The diaspora community has been, and continues to be, a significant source of investment, primarily stemming from Armenian communities in Russia, France and the United States. These investments have helped push the economy further up the value chain by making it possible for the country to engage in areas such as software development, robotics (for which the country had a long tradition when in the Soviet Union, primarily related to the arms industry and missile production) and microchip engineering. Nonetheless, most FDI has been directed at building infrastructure such as telecommunications and gas distribution networks, and towards the mining industry, so that these investments today represent a significant part of the overall export economy. In addition to investments from Russia (48%) and France (13%), FDI is from the United States, Germany, Cyprus, the United Kingdom, Argentina, Canada, Italy, Belgium and Switzerland, all of which are significant investors in the country (Investment Guide, 2013). The majority of investment is linked to the diaspora, however, and has more to do with patriotic and national sentiment than building capacity and sustainable capabilities.

Since the collapse of the diamond industry, Armenia has witnessed steady economic improvement, but at a slower pace, primarily focusing on economic sustainability and on some of the country's few comparative advantages. From 2009 to 2013, the value of industrial production from ore mining increased by over 127%, while refinement of these basic metals was increased by some 68%, linked to a reopened metal smelter in Alaverdi (Armstat Economic Activity, 2014). In the same period, average wages increased by around 48%, with major increases in both the unskilled and highly educated parts of the population (Armstat Economic Activity, 2014). The economic recovery has not seen the sustained GDP growth rates of the 2000s, where the average was 8.2%, but continues to be within the same range as the other

southern Caucasus countries, at least until recently (IMF, 2014). There are serious concerns that the economy saw significantly lower growth rates in 2015, at below 3%, due to a fall in commodity prices (Economist, 2015a; IMF, 2014). Inflation is relatively high (between 3 and 8%) and has fluctuated in the four years from 2009 to 2013. This development is mostly driven by its reliance on imports and is connected to consumer consumption and a rise in energy costs. In January 2015, Armenia joined the Eurasian Economic Union (EEU) together with Russia and Kazakhstan, two major resource economies, as well as Belarus. This political move is bound to have a long-term impact on the economic development of the country, but this remains to be seen. The decision to join the EEU has been linked to the security situation in Armenia and the need for goodwill from Russia for arms and security guarantees. At the same time, the two other countries in the region, Georgia and Azerbaijan, formed closer ties with Turkey and the EU, taking a different geopolitical and economic route.

Mining is one of the industries most exposed to risk from local communities. The industry has a profound impact on local financial, political and cultural development, which gives rise to differences in local expectations on how the community will be impacted, thereby feeding possible risk (Cheshire, 2010; Godoy, 1985; McMahon & Moreira, 2014). Countries depending on natural resources find themselves locked between the national ambition for economic and social development and the need to mitigate the adverse effects on local communities (Bebbington et al, 2008; BSR, 2003; Ishkanian, 2013). Business development in the Armenian context is complicated due to the country's long, turbulent history, its present-day geopolitics, its weak governance structures and its communist past (De Waal, 2003, 2010; IFC, 2013; Investment Guide, 2013; Mining Journal, 2011), but it also presents an ideal venue for exploring the relationship between mining MNEs and communities of place (Chapter 4). While the mining industry has encouraged positive economic development in the country as a whole, for example through the introduction of a mining code at the start of 2012 (Mining code, 2011), the benefits are far from equally distributed among the population. As mining areas are often located close to or within villages and towns, there is good reason to think that conflict between the two is likely to occur. The proximity between mining and communities of place has meant that communities have experienced impacts in many different ways (see Chapter 5 and 6). There have been adverse consequences when it comes to changes to the environment and the health of community members, but also positive consequences when it comes to improved socioeconomic conditions and opportunities to develop the community. The context of Armenia and the MNEs

operating there therefore provides an excellent case study setting for examining how these companies handle their relationship with communities of place.

Conventional risk management theory centres on providing correct and measurable information to managers who subsequently take decisions about what action the organisation should take (Hampton, 2009:30; Kot & Dragon, 2015). However, it is not the accuracy of the information provided, but rather how communities perceive and create meaning from the available information and their past experiences and how they link different events that determine whether the actions of the MNE are perceived as legitimate and, in the end, determine the level of risk that it is exposed to. Community risk is in this way different from other forms of risk in the MNE literature by being localised around the place of MNE production sites and founded on how communities of place make sense of the changes caused by the MNEs' activities. It lacks measurability and thus identification, as it is the perception and creation of meaning that constitutes the risk, rather than the objectively identifiable danger in itself. Communities of place are by their very nature geographically located near and directly affected by the MNEs' operation, and thus affected by the daily routines of employees rather than the strategic decisions of management.

1.2 Research question and content of the thesis

Knowing that communities of place pose an increasing threat to the ability of mining multinationals to continue their operations, this thesis seeks to answer the following research question by identifying the mechanisms that guide the relationship between mining MNEs and the different forms of community:

How do mining MNEs manage community risk in Armenia?

This PhD thesis includes five research papers (Chapters Two to Six), each of which addresses a fundamental element of the overall research question. To construct a coherent whole, each addresses a particular part of the research question with the aim of clarifying the conceptual contribution and the contextual setting of the MNEs operating in Armenia. By adopting an abductive research design the thesis, first, addresses the theoretical gaps in the literature and hence develops a theory that addresses these shortcomings (through the conceptual papers), leading to the construction of a model for community risk management. Second, this model is subsequently empirically tested through fieldwork in Armenia, which leads to a

refinement and updated version, found at the end of this chapter (supported by the empirical papers).

The thesis addresses the central research question through five sub-questions, each represented by an independent paper and placed as chapters in the thesis. Using the context of mining MNEs operating in Armenia in all the chapters, the first three papers are conceptual, addressing the concept of risk, community risk and the role of community risk management in the MNE risk management literature, while two are empirical, applying the concepts to the way that mining MNEs manage community risks (see Figure 2 for an illustration of how the individual papers relate to the three central dimensions described in the introduction). The sub-questions support and address the central elements in the main research question by answering the following:

- *How has the conceptualisation of risk management changed over time?*
- *What is community risk?*
- *How do mining MNEs operating in Armenia reduce community risk by developing trust?*
- *How is community risk management practised by mining MNEs in Armenia?*
- *How do MNEs reduce community risk by investing in the institutional context?*

Chapter 1 binds the papers together and starts with a review of the extant risk and MNE risk management literature. This is followed by an account of the methods and methodology applied and, at the end of the chapter, an account of the paper's findings and contribution is presented, as well as a model linking mining MNEs, risk management and communities. The following chapters address each of the five sub-questions and the three central dimensions of MNEs, risk and communities of place (see Figure 2 for an overview), starting with Chapter Two, which centres on what risk is and how the concept has evolved over time as the world has become more globalised and interconnected. The chapter also explores how the development in perception of risk has changed the way that people relate and perceive uncertainties in their environment through the process of making sense. Chapter Three addresses how this new conceptualisation of risk (as sensemaking) can improve our understanding of how to identify community risk as originating from communities of place, as well as how this can inform our theoretical understanding of community risk management and mitigation approaches in mining MNEs. Chapter Four answers the question of how risk management is conceptualised within the

MNE literature, and identifies gaps in the MNE approach to community risk management that can be closed through the proposed conceptualisation of risk as sensemaking, using Armenia as an illustration. These three papers establish the relational link between MNEs, risk and communities, using examples connecting these to mining and the Armenian context, and comprise the conceptual framework of the thesis which addresses the primary research question and investigates how to understand the relationship between MNEs and communities as entailing risks and opportunities for both. The following two papers (Chapters Five and Six) are empirical, drawing on the evidence collected, and explore how the risks from communities of place are managed and mitigated by investing organisational resources in the relationship, both communicatively and in the form of investments in the local institutional environment. By investigating these cases, the papers seek to explain how MMEs practise community risk management in the national context of Armenia.

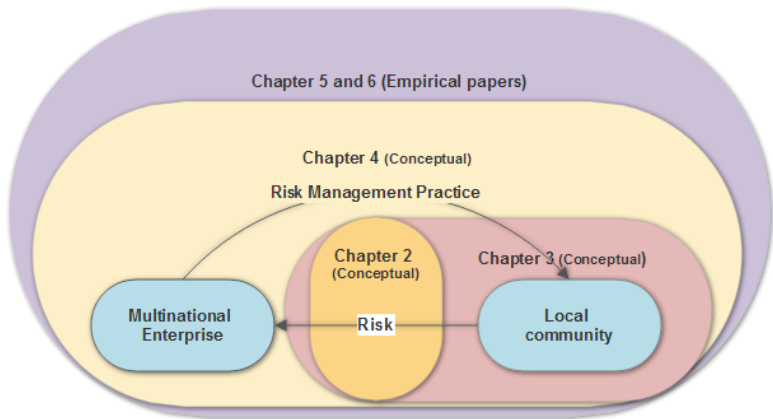


Figure 2. Chapter overview

1.3 Conceptualisation: Theoretical dimensions of the thesis

The aim of this section is to create an account of the theoretical framework utilised in the thesis and in the subsequent paper chapters, starting with how risk is conceptualised in the current literature and how a sociological understanding of risk contributes to broadening the prevailing utilisation of the concept within the international business literature. The section is also an account of how communities are understood as communities of place and communities

of interest that have distinct characteristics and abilities to influence the MNE. The section thus defines the key concepts and theories in the thesis and the paper chapters. Divided into five parts, the first four (sections 1.3.1 to 1.3.5) define and expand the concept of risk as a process of making sense of the physical and social environment through MNE engagement in risk management as a central activity, followed by a conceptualisation of communities and then MNE management of community risk. In the fifth part (section 1.3.6), a theoretical framework and a preliminary model for MNE community risk management is presented based on the literature review.

1.3.1 Risk and risk as sensemaking

This section provides a short account of the concept of risk as it has evolved from its origins in the natural sciences until today's sociological conceptualisation (further elaborated in Chapter Two). Contemporary risk research draws heavily on its roots in the 1960s and 1970s, within the fields of engineering, epidemiology and toxicology (Hansson, 2012:28). Today, where there are more nuanced approaches to the concept, it continues to be associated with events resulting in loss and even death. The definitions that are used to describe risk are also mainly related to these negative connotations about what risk entails. When we talk of safety, it is sometimes in the context of a situation that lacks accidents or is risk-free. The lack of clarity about what risk is and when something is "at risk" is also evident in the many different and sometimes contradictory definitions.

- A possible but not certain future harm, or the probability of such a harm, or the expected disutility of such a harm (Hansson, 2012).
- The possibility of an unfortunate occurrence (Aven, 2016).
- A systematic way of dealing with hazards and insecurities induced and introduced by modernisation itself (Beck, 1992, p 21).
- Taking a chance on something that will either bring pleasure or pain (Tulloch & Lupton, 2003).

Most of these definitions focus on the potential of unwanted and unanticipated events and the consequences that they can have in terms of doing harm, incurring losses or destroying something of human value. Even though we have come to think of risk as an unwanted occurrence, it might equally be a welcome change that we had not expected, as indicated in the Tulloch and Lupton (2003) definition; however, we continue to have a tendency to think of possible risks as something that should be avoided or at least managed to the degree that is

within our power. The contemporary understanding of risk is significantly more nuanced, but not necessarily more than it was in the 1960s. Our understanding of risk, and thus our ability to manage it, has as much to do with the perception of risk as it has to do with the objectively scientifically measurable unwanted events themselves. This realisation has meant that theories of risk have evolved from a functional perspective, where risks were a matter of quantifying uncertainties in the physical and social environment, to an increased focus on the risk manager as a risk decision-maker. The creation of meaning or the process of making sense of risk is central to how it is conceptualised and consequently also the actions taken when mitigating the risk.

Karl Weick (2001) was one of the first to recognise that to determine whether something in our environment is real, it has to make sense to us and is influenced not only by ourselves but also the social and physical environment of which we are part. The process of creating meaning, or sensemaking, is "the ongoing retrospective development of plausible images that rationalise what people are doing" (Weick, et al., 2005:409) which people go through to determine the realness of the world around them. Sensemaking involves seven elements, each of which contributes to our creation of meaning. Furthermore, this process does not take place in isolation from our physical and social environment and depends on who we are, or our identity as we perceive it in our social context (Weick, 2005, 2012:129ff). Other factors include the information which is available to us, the retrospective knowledge we have about how the world functions and our actions (or enactment) in the social world. This process is an ongoing process, and as we become more knowledgeable about what is going on in our environment, we are building upon the decisions that have proved successful in the past and improving our ability to handle the uncertainties that we are confronted with as they arise. We extract cues from our environment that either enforce or hinder certain conclusions from becoming salient and base our perception of what makes sense on whether the image we have created seems plausible. Collecting fragments of information from our surroundings and filling in the missing pieces with experience and rational thinking, we are thereby determining what makes sense in the world. In that sense can the creation of meaning be characterised as distributed sensemaking, where the complexity of our physical and social environment is continuously negotiated with our surroundings in order to reduce it to something that is meaningful (Weick, 2005).

As further explored in Chapter Two, risk can no longer be defined as purely objective or according to a fixed definition of social and technological features; it is, rather, a way of conceptualising the decisions made in our social environment (Gephart et al., 2009). While real

dangers, threats and opportunities exist, it is only our cognitive awareness of their existence that connects them to our mental map of the world and how it functions. From a risk perspective, sensemaking is a mental construction created by both individuals and organisations, in dialogue with the social and physical environment, which enables us to differentiate between risks and opportunities. As a consequence of this process, we create organisational structures based on the success of our past decisions and the knowledge that there are unknowns in our environment which we need to guard ourselves against (Bammer & Smithson, 2008:17; Mikes, 2011). When individuals create meaning, they use their past experiences and make connections between the actions that they took then and the plausibility that similar actions will produce the same result in the future. What seems like an objectively identifiable fact to some might be seen as wishful thinking, because past experiences say so. Sensemaking is thus a retrospective process where the individual uses past experiences to judge what will make sense in the future. Evaluating what constitutes a risk (or opportunity) is not only informed by the estimated chance of an event, as prescribed by the functional perspective, or our ability cognitively to identify events as risky, but also by past and present knowledge of similar occurrences.

There are two elements of sensemaking that are central to the process of creating meaning from risk events, namely cues and plausibility (Weick, 2005). Cues are partial pieces of information that provide inferred evidence that an event will unfold in a certain way, thereby providing insights into the trustworthiness of the information that they contain. Plausibility is defined as the functional deployment that imposes labels on interdependent events, which suggests that there are plausible acts of managing, coordinating and distributing events that share the same characteristics. By acknowledging that there are neither perceptual nor cognitive resources to explore everything that affects a given event, we rely on cues to provide us with sufficient information to identify risks and an evaluation of the plausibility that these future outcomes will materialise into risk events if not mitigated successfully.

Cues provide us with a basis for how we can explore the emergence of new events or changes in our environment. They enable us to make sense of events as they are unfolding and take the necessary actions to mitigate possible outcomes, even in the face of fragmented and incomplete information. As people are sensitive to the behaviour of others, they may include behavioural cues from other structures in their environment, even though they do not regard an event as risky or sufficiently salient to require an expenditure of energy (Dunwoody & Griffin, 2015). Enabling people to make proactive risk management decisions, even though they have not made sense of an event as either a risk or an opportunity, also leaves room for errors when

we react to behavioural cues from our surroundings and assign plausibility as a signal of risk, despite this not being the case. Risk management is in this sense a complicated task, where individuals try to predict the behaviour of others even when they are unaware of the signalling effect of their actions, where the decision to measure and quantify specific possible future risk events could induce risks that were not present before by providing behavioural cues for others.

Community members are in the same way engaged in the process of creating meaning about the realised and future effects that a given change might impact their lives. Corporations that are engaging in activities that in some way impact these communities will consequently be part of the sensemaking process and of how individual community members perceive these activities as a change are made to their livelihood, health, local environment or the social structure of their village or town. While we know that individuals create meaning based on what makes sense and not necessarily on what is objectively correct, it is possible that they will take actions that can lead to risks to business continuity, not necessarily based on what is real but rather on what is perceived as real. As an example from Ararat village illustrate “The birds were sitting on the polluted water and dying: most probably it was affected by the heavy metals, which had a very negative impact on health. There were so many diseases in Ararat village that you were surprised, they are resulted from the use of cyanide for gold refining purposes and that the company didn't use any neutralising chemicals to neutralise the cyanide.” (Interview in Ararat). Illustrating how villages make sense of changes in their environment and the impact of mining.

Utilising risk perception as sensemaking avoids the discussion of whether people are rational or irrational that has been one of the main critiques of the traditional risk perspective. By focusing on the process of creating meaning, people do not have to adhere to some normative standard of what is rational, but rather explain their behaviour by exploring how they make sense of the world around them. This opens up other ways of explaining how organisations and people manage risks, as it allows us to understand how the environment contributes to the decision-making process. From the sensemaking perspective, it is not the power to force people to act in a certain way that is studied, it is the actual behaviour itself, and conceptualising from that vantage point what in the social and physical environment made these actions plausible. The concept of risk is in this way better defined as what makes sense as being a risk, given our identity, knowledge and cognitive abilities to perceive it as such. At the same time, it also provides insights into how this process unfolds, as people differentiate between those risks that require action and those that do not. For the MNE risk manager, this perspective opens up alternative ways of conceptualising risk, risk exposure and risk management, which is centred

on the process of identifying and managing uncertainties rather than quantifying possible adverse events. Here the management of risk becomes the business of identifying underlying mechanisms that cause certain unfavourable processes to be initiated and of applying the right organisational resources to interfere in these.

Sensemaking as a way to conceptualise risk contributes to this PhD thesis by providing a twofold explanation for how the relationship between MNEs and communities of place unfolds. First, it enables an understanding of how potential risks are perceived and acted upon by the MNE risk manager, who is tasked with making decisions that affect the relationship between the company and the communities near their place of production. Knowing how managers make sense of community risk assists in explaining the choice of management practices that are deployed when decisions are made to mitigate potential threats and what outcome MNE risk managers expect to gain from committing organisational resources to different forms of activity aimed at the community. Secondly, the concept of distributed sensemaking (Weick, 2005) also provides a conceptual framework for how communities create meaning from the changes that are initiated by the MNE. Communities do not perceive the effects that the MNE has in isolation from all the other changes that they are affected by in their social and physical environment. Rather, the effects of MNE activities are part of a sensemaking process where these changes are just one of many cues that make up how communities are creating meaning. Thus, sensemaking can support an analysis of how community risk materialises and of the meaning creation process that leads to communities taking actions against a given MNE.

1.3.2 The role of tacit and explicit knowledge in sensemaking

Knowledge about community risks can be either explicit, as seen through various uses of standards and best practice documented by the industry (EITI, 2015; ICMM, 2015), or based on tacit knowledge, linked to the experiences that managers and employees of the MNE accumulate over time (Foss & Pedersen, 2004; Mudambi, 2008). The use and circulation of a generic set of risk management standards creates pressure on organisations to conform to a set of normative models on how to manage risk by established (explicit) frameworks (DiMaggio & Powell, 1983; Power et al., 2009). Using such systems hence means that the MNE converts tacit knowledge into best practices, through standard operating procedures or other forms of normative structures to capture the collective experiences of the organisation. The MNE's explicit knowledge can thus be found in the documentation that it creates through the use of management systems and

procedures, subsequently shared through its different entities down to day-to-day management decision making.

When it comes to the risk management of communities, the use of social responsibility standards has been regarded as one of the ways that mining MNEs have been able to collect explicit knowledge, not only from the organisation itself but also from other industry actors who are facing similar community-related challenges (ICMM, 2015; IFC, 2012; EITI, 2015). These systems are generic and require local adaption, often with the help of outside local experts, to address challenges related to the specific context in which the mining MNE operates. Tacit knowledge, therefore, plays a crucial role in local adaption and the efficiency of the system to mitigate risk and arises from the transfer of knowledge from one activity to another within the firm. Here, the intra-firm context is regarded as being particularly important when transfers involve complex tacit knowledge and skills, as when dealing with social interactions such as the ones extractive companies have with both communities of place and of interest, highlighting the importance of inter-organisational relations across branches and the existence of a competent local workforce. The existence of these strategic assets facilitates stronger organisational bonds which enable transfer of tacit knowledge within the individual mining MNE and between different companies. While standard operating procedures is regarded as a way for the MNE to convert tacit knowledge into explicit, it might not always be possible to do so efficiently therefore requiring local expertise to deal with complex social and cultural challenges.

Sensemaking plays a crucial role when it comes to the transfer of knowledge (Weick, 1988; 2005), both when managers learn from experiences through formal training, the organisation through the use of standards (explicit) and when learning from experience through practice. Karl Weick (1988) made the connection between tacit and explicit knowledge, stating that “People who come up through the technical ranks have hands-on experience and the requisite knowledge to sense variations in the technological environment they face.” The formal training and the experiences of the organisation support management decision making by acting as cues to the consequences that decisions might have in the future. As managers create meaning based on who they are and their interaction with the social environment, it becomes an ongoing process where the manager not only relies on the collective experience of the organisation, but also on the feedback from the social environment acting as cues to the plausibility that decisions will have a particular outcome. Thus, both explicit and tacit knowledge plays a central role when managing risks. The collective knowledge of the organisations plays a role in legitimising

decision making and in ensuring that the experiences of the individual decision maker are included, thereby reducing uncertainty about the quality of these decisions in future events.

1.3.3 Community risk and the multinational enterprise risk management literature

The management of risk is the primary objective of all firms operating internationally, as it forms the basis on which companies generate earnings, gain access to resources and even attract talent, and without good risk management practices they would be destined to fail (Clark & Marois, 1996; Ghoshal, 1987). The MNE literature has focused on different strategies and management approaches which companies that are internationalising can apply when they identify and mitigate risks (this is explored in Chapters Four and Five). Most of the threats faced by MNEs are shared with the companies in the host country; however, some risks uniquely affect MNEs and thereby put the host country's existing companies at an advantage. While there are only a few studies that target risk management in the internationalisation process, they all involve some trade-off between time and resource commitment (Figueira-de-Lemos et al., 2011; Kwok & Reeb, 2000; Miller, 1992). MNEs are subjected to the "liability of foreignness" and therefore endure higher costs compared to domestic firms because of differences between the host country's cultural, political and economic environment and that of their home country (Hymer, 1976; Zaheer, 1995). Because there are higher costs associated with being an outsider, foreign companies are deploying additional resources or taking more time to acquire the necessary knowledge, thereby promoting a precautionary approach to risk, where MNEs gradually acquire the managerial competencies and organisational abilities necessary to cope with the uncertainty (Johanson & Vahlne, 1977; Johanson & Vahlne, 2009). The risks associated with being an outsider remain the same, but the MNE improves its ability to acquire knowledge and thereby reduce risks, including the ones originating from communities, as it becomes more experienced with the internationalisation process.

Miller (1992) described three types of risk that MNEs face, namely the general environment, the industry and the firm itself. The first category includes everything in the social environment, including political, cultural and macroeconomic uncertainties. The second group comprises risks associated with the industry, such as the quality of products to which customers are accustomed, the reliability of suppliers and the level of competitor rivalry. Finally, there are uncertainties associated with the MNE's own managerial competencies and the organisational abilities needed to operate efficiently. While both industry and firm-specific risks are significant factors in the internationalisation process, it is mainly the risks associated with the social

environment that have been an area of focus (Dunning, 1981, p. 29; Peng & Meyer, 2011), facilitating the development of three distinct risk categories, financial, political and cultural risks (Kot & Dragon, 2015; López-Durate & Vidal-Suárez, 2010).

Financial risk is driven by a market-driven orthodoxy, and is made up of possible threats that can affect the economic situation of a company and which are more salient for the MNE than for domestic firms (Hagigi & Sivakumar, 2009; Jorion, 1996). Exchange risks are fluctuations in currency price affecting the local cost level compared to the market that the MNE is selling its commodities to. Commodity price risks are where changes occur due to changes in demand and the cost of production as world market prices fluctuate. Equity market risk is the availability and possibility of procuring capital from local sources in local currency. A lack of funding can lead to exposure to exchange risk, as equity has to be brought in from abroad. Political risks entail the arbitrary consequences arising from political events that affect organisations' ability to operate (Butler & Joaquin, 1998; Lou, 2009; Miller, 1992; Simon, 1984). These include non-market events, economic and social changes that might occur because of decisions made by political institutions. Political risk is driven by societal moral orthodoxy and encompasses a broad range of politically motivated actions, from riots and politically motivated vandalism to debt restructuring, resulting in changes to the economic infrastructure and expropriation of land and private enterprises. It can also include the impact of a wide range of government policies (macroeconomic, social, labour, industrial, trade, foreign exchange and so forth) which affect the financial and competitive situation of the MNE. Country risks (see, for example, Hagigi & Sivakumar, 2009; Hoti & McAleer, 2004; Gavras et al., 2016; Lou, 2009), in some cases referred to as cultural risks (for example, Graetz & Franks, 2015; Lodh & Nandy, 2008; Lou, 2009), are driven by a national cultural orthodoxy and include changes to national or sub-government institutions as well as social and cultural variations between MNE management and the host country context. There is widespread disagreement about what factors should be included as country risks and linked to a unique national context; however, there is consensus that the national cultural context does have an effect on MNE risk exposure and that the impact of cultural distance between the home and host countries has a significant effect on business continuity.

When it comes to addressing the relationship between MNEs and communities of place and the risks this relationship entails, these perspectives include a series of fallacies. This is because while there are good measures of risk at a national level, there is a lack of context specificity that identifies communities of place as a unique source of risk events, and thus it is

difficult to measure these types of localised uncertainty. The MNE literature describes communities as being a source of risk, as political risk events that are addressed by managers at the local level (Lessard & Lucea, 2009; Stevens et al., 2016), as part of part of the wider stakeholder group which needs to be addressed together with customers, employees, suppliers and an undefined group of communities (Hillman & Keim, 2001). Some firms have marginalised communities of place because they "are not engaged in transactions with the corporation and are not essential for its survival" (Clarkson, 1995, p. 107); however, the evidence presented regarding the impact of corporate social responsibility (CSR) and stakeholder engagement research suggests that there should be more attention given to communities of place because of their increased influence on business continuity (Campbell et al., 2011; Husted & Allen, 2006; Park et al., 2014). It is these localised, norm-driven risks that make up the gap in the MNE risk management literature, which is being closed here by conceptualising community risk and applying it to the risk management practices of mining MNEs operating in Armenia. Table 1 provides a summary of the risk orthodoxies, which are further explored in Chapter Four.

Table 1. Risk type orthodoxy

	Type of risk			
	Financial risk	Political risk	Cultural and country risk	Community risk
Orientation of risk management practices	Market driven pragmatic orthodoxy	Societal moral driven orthodoxy	National cultural driven orthodoxy	Localised normative-driven orthodoxy

1.3.4 Local communities as communities of place

Local communities are increasingly in a position to apply pressure on mining MNEs (BSR, 2003; ICMM, 2015a; 2015b). Access to communication technologies has also given even the most remote places opportunities to organise and gain the information and knowledge needed to apply significant pressure to these companies to change their behaviour, or in some cases stop operations entirely (Harvey, 2014; ICMM, 2013; McDonnell, 2015). In the Armenian context, there are several examples of communities organising and seeking changes to corporate behaviour, and one of them highlights the complexity that mining MNEs face.

In 2015, the small village of Gndevaz in central Armenia saw a series of demonstrations by local community members, following permits being granted for exploration for gold to the Canadian MNE, Lydian International.

Civil society actors had long been raising concerns about the impact of the project on the local rivers and lake ecosystem. They believed it would affect water quality, and one of Armenians' few sources of uncontaminated fresh water. Gold mining was a particular concern, as it involves the use of cyanide to separate the precious metal from other ore material, a process which was described by the mining company as quite safe when carried out within the internationally recognised safety rules that apply. The gold mine at Amulsar is located between two major rivers, the Vorotan and the Arpa, which feed Lake Sevan, the only major freshwater lake in the country, and there were warnings that cyanide leaking into these bodies of water could have grave consequences for both local communities and the country as a whole.

"The Amulsar mine is located in the basin that feeds Lake Sevan, and will contaminate surface and subterranean waters that run into the Kechut and Spandaryan reservoirs and from there into Lake Sevan," said Nazeli Vardanyan, chair of the Forests of Armenia NGO.

The local community was at first not engaged with the activities of the company, waiting to hear what its concrete plans were, but over time they became increasingly involved in demonstrations and worked with activists from the capital, Yerevan. While they were not sure what the impact of the mine would be, they found it prudent to team up with the activists to gain some influence on the future of the project. As one community member said, "There were demonstrations and I just joined in and shouted at the company. Something to tell the grandchildren."

While the commitment of the community members was somewhat half-hearted, the impact of the demonstrations, and not least how it was communicated, was much more profound when displayed in the media. One of them listed ten reasons why it would be counterproductive to the development of the villages surrounding the mine and the country as a whole which, besides the issues surrounding freshwater, listed the presence of radioactive materials in the ground, dust pollution, the impact on flora and a low gold yield at 0.8g per ton of ore as major reasons why the mining project should be closed down. They ended their statement by proclaiming that: "Aside from these facts, all potential investors should bear in mind that we as civil society aspiring for democracy, rule of law and the rights of populations to live in a healthy

and prosperous environment, will do our best to deter operation of this and other mines by removal of potential corruption-backed systems and regimes” (Save Teghut, 2014).

Subsequently, Lydian International had to commit significant resources to proving that the existence of the mine could not affect the waterways or the wellbeing of the community. In the following years, the company has built gas pipes to three nearby villages, constructed roads, renovated the local library and community house, and provided local farmers with cheap loans that enabled them to start small businesses. In an interview, the CEO of Lydian International stated that: "If we ignore these demands during the project implementation, the communities may accuse both the government and the company of violating the expertise process and demand proper compensation or resettlement. We have assessed these investment risks."

In an interview with the Canadian CEO, his opinion of the civil society actors involved was very clear. "The NGOs here are extremely aggressive; they are more active than anywhere else. The latest example is that the day before yesterday we had a meeting organised by the NGOs: one of them stood up and said that if I had known that Lydian would be here, I would not have come. They do not want to engage. They have a very simple view that activists can stop mining, which in my opinion is a total dream."

There have been two main approaches to understanding communities in the business literature, one focused on communities as stakeholders and another on the activities that they engage in. The stakeholder perspective, with its most prominent proponent Edward R. Freeman (1984), argues that organisations could benefit from identifying and engaging with individuals and groups beyond the traditional customers, suppliers, competitors, etc., including “groups who can affect, or who are affected by, the achievements of the organisations’ objectives.” (207) It further argues that, by doing this, organisations and companies would be in a better position to make strategic decisions than other competing organisations, but also that there is an obligation to meet the expectations that these stakeholders might have in the form of, for example, CSR (see Donaldson & Preston, 1995; Visser, 2011; Yakovleva, 2017). A further understanding of communities is presented by Etienne Wegner (1998, p. 5), who argues for communities of practice as “a way of talking about the social configurations in which enterprises are defined as worth pursuing and our participation is recognizable as competence.” The author further contends that human engagement with the environment is first and foremost based on the creation of meaning, thereby focusing on the activities of the community and the processes that lead communities to interact in certain ways.

However, communities are not based solely on the activities they engage in or their importance to different organisations and companies. The notion of what communities are has developed significantly within the last decade and therefore needs clarification. In relation to mining, communities have traditionally meant the people, groups, villages and small towns in the nearby environment of a mining project, without explicitly defining the group (see, for example, Harvey, 2014; Kemp & Owen, 2013); however, with the introduction of information technologies and social media, communities have come to mean something much more than the local population. Using new technologies, communities are to a large extent interconnecting and co-developing beyond their physical space (Brennan et al., 2013). The lack of a precise description prompts the need for a definition of what communities are, how they come into existence and on what basis they interact. In the Oxford English Corpus, “community” is defined as "a group of people living in the same place or having a particular characteristic in common" (Oxford Dictionary, 2016). By these definitions, communities are described both as local and directly affected by changes in their social and physical environment (communities of place), and as social networks who have an interest in these changes (communities of interest) (Calvano, 2008; Dunham et al., 2006).

This distinction between these two forms of communities has consequences for our understanding of the mechanism influencing community risk management. Etienne Wegner’s (1998, p. 53) concept of “negotiated meaning” and Karl Weick’s (2005) argument for organising through “distributed sensemaking” contribute to how our understanding of how communities make sense of changes in their environment. Members of the community do not make decisions in a vacuum because of the complexity they face on an everyday basis. They rely on their mutual workflow and cognitive interdependence (the community hierarchy and organising) with other members to produce workable outcomes (Crow & Alan, 1994; Dunham et al., 2006). As stated earlier, communities of place are groups of people who live together in the same physical environment and share the same economic, educational, religious and cultural institutions but who have benefitted differently from these institutions as the community has evolved. There exist variations in personal income, education levels, religious belief and usage of cultural facilities, but in principle, they are available to everyone in the community. However, from the start of a given significant change, such as the impact of a mining project, members of the community of place are exposed to the same dangers. Risks can in this sense be said to be democratised and shared across the community (Beck, 1992). Everyone is in this sense exposed to similar economic, environmental and social changes, and has the same options for mitigation

of their risk exposure and possibilities for seeking new opportunities arising from the mining project. The differences emerge when it comes to the ability of individual community members to take advantages of these changes and thereby improve their position within the community and in society in general. Mining projects in that sense represent both risks that threaten the community of place as well as its members and opportunities to explore positive changes. Some community members will be highly critical, regarding the project as a threat, while others will be optimistic and see opportunities that would not be available to them had it not been for the existence of the local mine. The common denominator, for communities of place, is that they are a group of people who are bound together, not by a common belief system or the practices they engage in, but by the nearness of their daily lives, the institutions that exist there and their possibilities to take advantage of these changes. They are in that sense influenced by what Ulrich Beck (1992, p. 36) captured in the phrase “poverty is hierarchical, but smog is democratic,” where social status is hierarchical, but the environmental and social effects of mining are “democratically” distributed among community members. Not that changes affect the community equally but that the consequences of having an extractive industry surpass former social standings. The example from the village of Gndevaz illustrates how communities weigh risk and opportunities against each other and thereby “negotiate meaning.” As the community members were uncertain about whether the Lydian International project would present risks or opportunities, they chose to side with the civil society actors, not necessarily because they were against the project, as such, but because it would provide them with legitimacy in the community if the mine turned out to have a negative impact. “I participated in discussion with Geoteam at the school. There were demonstrations, I just joined and shouted at the company. Something to tell the grandchildren” (Interview with Gndevaz, 2015). The community members negotiate what stance the community as a whole should take towards the project, not that they agree on an individual basis, but that they through a process of “distributed sensemaking” find workable solutions to the risks they as a community face together. As described by the mayor of Kajaran and the village head in Teghut:

“Since the company started its operations in 2006, at that time, there have been conducted both public hearings and meetings with community members. In case of production expansion, there would be conducted both public hearings and meetings with community members and the company considered the community members' opinions” (Interview with Kajaran mayor, 2015)

“The company conducted quarterly meeting-discussion with the members of local community. During the meetings, Valex Group informed about its activities, and the villagers might raise their issues and discuss them directly with the employees of Vallex Group” (Interview with Teghut village head, 2015).

This perspective on communities does not include the possible discussions in preparation for the acceptance or rejection of a given mining project, nor that there could exist different fractions that to varying degrees support or oppose a given mining project. However, from a risk management and distributed sensemaking perspective, the possible internal negotiation is regarded as part of the process which will constitute an isomorphic pull and ultimately legitimise the project in the community. By focusing on the outcome of the community members’ combined interconnected sensemaking process, rather than on different positions within the group, it becomes clearer which mechanisms have led to the current prevailing decision of the community.

Communities of interest are groups of people who come together because they share certain common beliefs or characteristics (Calvano, 2008). These beliefs focus on one or more of the social cultural changes, economic impacts or environmental consequences of a mining project or are linked to their political beliefs about mining in general. Communities of interest are in this way not embedded in the cultural and social life of communities of place, but are bound together because of their opinion about the impact of mining and are willing to act on their belief. An example of such a stance was expressed by the NGO Pan-Armenian Environmental front when describing the mine at Kajaran operated by the German MNE Cronimet.

“The Death of Kajaran. It seems to me that it can be described as such. Look at these beautiful mountain chains... that they are taking away, devouring, stealing day by day.” (Interview Pan-Armenian Environmental Front, 2016)

Another NGO, Save Teghut, was concerned about what was going on in the small village of Teghut, which was next to the mining MNE Vallex, specifically about dust from the mining and transport of materials at the site and the rumour that the dust was radioactive (which later on was proved to be false):

“Radiation - some of the locals asked for radiation equipment. There are issues with dust, they (Vallex) water the roads sometimes twice a day. But mainly when important people are coming like the guy from Denmark or others” (Interview with Save Teghut, 2016).

Like communities of place, communities of interest are interested in both the risks and opportunities that mining brings to a given geographical context, but because they are brought together by their beliefs rather than their proximity, they focus their activities on either the risks or the opportunities that come with mining. For example, there are several civil society groups active in Armenia. Some focus on the environmental impact of mining (see, for example, Ecolur, 2015; Pan-Armenian, 2015), while other groups are active in campaigns that span both social and ecological concerns (see, for example, Civilnet, 2015). Others focus on a single mining project and investigate economic, social and environmental impacts (see, for example, Teghut, 2016). There are very few big international NGOs (BINGOs) present in Armenia and the interest is decreasing due to legislative requirements in the country targeting foreign NGOs and donor organisations. Especially issues to do with corruption, foreign economic support, the nearby conflict with Azerbaijan and political affiliations have created uncertainties for these organisations (Transparency International, 2011). One exception the donor organisation USAid (USAid, 2017), which engages in a wide range of projects focusing on culture and education as its main areas of interest. At present, there are no international NGOs that work specifically with extractives or mining, and while the communities of interest do not include internationally well-known groups like Greenpeace or others (Greenpeace, 2017), they would in principle be included if they had a presence. There are also communities of interest that work to promote the positive impact of mining in Armenia, where mining MNEs and professionals come together to improve their knowledge about the industry (see, for example, the Armenian Mining Network, 2016). These groups are, together with several other communities of interest, focused on the impact of mining in Armenia, and are active through information technologies such as social media (see, for example, ICMM, 2016; Mining.com, 2016; Mining Watch, 2016). As some of these communities of interest illustrate, they are they not necessarily bound by the borders of a specific country but rather by their interest in mining. They thus become interesting from a community risk management perspective as they make claims in favour of or in opposition to mining when they affect the specific mining MNE’s risk environment.

There can be overlap in the interests of the two forms of community, but they seldom totally coincide, as seen in the example from Gndevaz. While communities of place evaluate both risks and opportunities presented to them, communities of interest are focused on promoting an—and often just one—agenda. Communities of place are in this way bound to their localised environment, which is being impacted by mining operations. Over time, they are exposed to risks and opportunities, which they relate to in different ways and try to evaluate the impact they might have. Communities of interest are at the same time trying to educate and inform by presenting different frames of meaning with the aim of influencing the community of place in terms of their perception of the risks and opportunities that they are facing. With the increased availability of communication technologies which enable communities of place to communicate efficiently, they gain access to information about how mining impacts their lives, thereby increasing their knowledge about mining and their awareness of how they can mitigate risks and maximise opportunities. At the same time, the complexity of these decisions increases as knowledge about alternatives and conflicting interpretations about how the community is impacted are being presented and processed by members.

For the mining MNE, this distinction between two forms of community is important. Communities of interest are, as part of the justification for their existence, either opposed to or positive towards a given mining project. Communities of place weigh both opportunities and risks and can thus be influenced by their surroundings to be either opposed to or supportive of a given mining project. The decision of the community of place to trust and thereby legitimise the actions of the company can in this way have an impact on the perception of the mining MNE far beyond the local context. Communities of interest can use these legitimacy claims to support their agenda, either opposing or supporting the MNE, and thereby use the way that communities of place made sense of the changes imposed by the MNE as financial, political and cultural risks.

1.3.5 Community risk and mining MNEs

The mining industry has a long history of challenges when it comes to its effect on everything from local communities to the local and global environment, and even countries' economic and social development (Godoy, 1985; Hoskin, 1912; Lynch, 2002; Morris et al. 2012). Mining companies all over the world have been associated with violations of the rights of indigenous people and the populations living close to their operations, even to the extent of what can be characterised as small wars (Ballard & Banks, 2003; Bebbington et al., 2008). Their

impact on the physical landscape is always profound, as not only are mining pits dug, but also infrastructure is established that is needed for mining. The consequences of these changes mean that there are severe environmental impacts not only in the production phase of a mine, but even as it is clearing forests and top-soil, establishing roads, diverting waterways, etc. (see, for example, Petrosyan et al., 2004; Sagebien & Lindsay, 2011, p. 182; Veltmeyer & Bowles, 2014). On a country level, there can be political challenges to what has been called “the resource curse” or “the Dutch disease,” which are threats to long-term economic and political stability in countries that are overly reliant economically on the resources they have (Auty, 1994; Gel'man & Marganiya, 2010; Morris et al., 2012). The existence of resources has in this way been linked to financial, social and cultural risks from the very start and, despite attempts to curb the negative effects there are, even today, risks in all these areas that are still to be effectively addressed (see, for example, Harvey [2014] and Labonne [1999] on social development). The effect of mining activities on local communities is well documented all over the world, as the environmental and social impact changes people's lives, giving rise to civil society actors (critical communities of interest) who have documented and, in some cases, have been able to stop production. The introduction of these non-technical risks has meant that mining companies are increasingly interested in how this type of uncertainty can be managed effectively (BSR, 2011; Davis & Franks, 2014), especially as mining companies start to quantify the cost of conflict in the millions of dollars and as something that to some degree lies within management control and is not just part of the cost of constructing a given mine. Furthermore, there is a need for more research on the approaches and structures that mining company risk managers can utilise when engaging in community risk management. The present study is a step in this direction.

Communities have become a priority for mining MNEs, as they pose a unique threat that has proved difficult to manage and at the same time are a group that is able to apply significant pressure that can change or stop their operations entirely (BSR, 2003; Harvey, 2014; ICMM; 2015; Kemp & Owen, 2013; Prno & Slocombe, 2014). Critical non-governmental organisations (NGOs) have been able to expose mining companies' use of illegal and unethical business practices and, through campaigns on site or through the media, have applied pressure to these companies (BSR, 2003). Mining MNEs exposed to these forms of localised risk have found it difficult to gain the benefits of internationalisation because of the enduring losses when operations have been closed down, and a large proportion of these have originated from cases found among communities of place close to mining operations (Davis & Franks, 2011; Kraemer

& van Tulder, 2009). Gaining and retaining a legitimacy or “social licence to operate” (SLO) has always been important for mining companies because of the significant changes to the local social and physical environment involved (Prno & Slocombe, 2014; Thomson & Bouillier, 2011). An SLO is defined as existing when a mine has the ongoing approval of the local community and other stakeholders have broad social acceptance of the project. Thus the legitimacy of the MNE and the potential risks from communities are connected as “the process of organisation [justifies] to a peer or subordinate its right to exist” (Suchman, 1995, p. 573) and, if this justification does not exist, the organisation (in this case the mining MNE) will be threatened or ultimately cease to exist through the loss of business continuity.

Globalisation and the rise of global communication technologies have proved that it is difficult for companies to handle their SLO, as multiple communities of interest make claims against their physical and social impact. One response from MNEs aimed at retaining legitimacy towards communities of place has been the introduction of standards for socially responsible corporate behaviour. These generic systems for managing this relationship can, for example, come from intergovernmental organisations such as the World Bank, which issues the Performance Standards on Environmental and Social Sustainability (IFC, 2012) and is organising the Extractive Industries Transparency Initiative (EITI, 2015) that supports transparency in the sector at a country level. Other systems come from private consulting companies aimed at organising companies’ reporting and thereby displaying transparency towards stakeholders. Systems such as the Global Reporting System (GRI, 2006) are aimed at coordinating organisations’ work on CSR and presenting it in a way which is transparent to outsiders. A third category of these systems is developed by the companies themselves as a way to show that they are working on CSR. While most of these systems do not follow any of the standards described above, they are an effort to show how the organisation is engaging in different forms of activity aimed at local communities. As will be shown later (Chapter 5 and 6), all of these different approaches are to some extent being deployed by MNEs operating in Armenia and are part of how communities of place as well as communities of interest evaluate mining MNEs’ practices.

However, the use of standards and displaying transparency through reporting do not stand alone when looking at how communities evaluate the information available to them. Communication networks play an important part, as they allow communities of interest to communicate in an efficient and timely manner with each other and with communities of place, as well as with possible interested members of society. The free movement of information from

the local community to the outside world means that a seemingly small event can escalate fast and beyond the relatively closed sphere of the local community, thus reaching a much larger and possibly global audience (Horowitz, 2010; Obeng-Odoom, 2014; Triscritti, 2013). The interpretation of events depends on how a community of place handles the information that is available to it and how it makes sense of the impact of the local mine. In turn, this can result in the involvement of financial, political and cultural communities of interest which can use the event to promote a certain agenda. These critical communities of interest can in this way apply significant pressure on the mining MNE and effectively result in the company losing licences or enduring changes as shareholders worry about the safety of their investments, political actors apply pressure on the company to invest more resources in community relations or mitigation of its environmental impact, and culturally or socially important people (such as religious leaders or important public figures) raise awareness about the perceived corporate conduct (Gifford & Kestler, 2008; Harvey, 2014; Mutti et al., 2012). In this way, communities of interest are outside the sphere of formal societal institutions that operate on the basis of legal, financial or national identity systems, but can be influenced by raising issues related to political, economic or cultural challenges.

Mining MNEs are particularly exposed because of their geographical reach beyond the single context, as the number of communities of interest who have an interest in the project is proportionally higher than in a mining project operated by a local company, which is only active in one country. While the impact on the community of place might be similar, the risk exposure to the company is significantly different because the information reaches and makes sense to a significantly larger number of communities of interest than the activities of a local firm, which are relatively unknown to the outside world (Anderson, 2014; Veltmeyer & Bowles, 2014). Interference by communities of interest can leave the local community sidelined and can in some cases mean that opportunities for social and economic growth never materialise because economic, political and cultural stakeholders in effect revoke the MNE's SLO (BSR, 2003; Prno & Slocombe, 2014). A mining MNE is thus exposed to risks from both the local community and a large indefinable community of interest, both of which have the capacity to affect the degree to which it has a social licence in the geographical area where it operates. While communities of interest are dispersed and only make their presence known when certain cues corresponding with their *raison d'être*, in this case social and environmental consequences of mining, come to their attention, communities of place are well defined and physically located near the MNE's place of operation.

1.3.6 Model and theoretical conceptualisation of community risk management

Based on the literature review, it is possible to construct a model of the processes involved when MNEs manage community risks (see Figure 3). The model consists of the four dimensions described in the introduction: The Armenian context which influence the multinational enterprise (mining MNE) management of risks from local communities, and finally the management practices that are employed in order to mitigate these risks.

Mining MNEs have a number of specific characteristics pertaining to their home country and the industry they are a part of, and influenced by the institutional, social and physical environment of which it is part. The mining MNE is exposed to and manages different forms of risk, including risk from communities, that it mitigates by allocating the necessary resources to minimise or mitigate them. The mining MNE relates to two forms of community: communities of place—in this context, villages and towns which are directly affected by the mine and are geographically situated close to the production site; and communities of interest, which engage in activities that can affect the MNE's operations based on how mines and the mining industry are regarded in general by the community. It is initially not known how resource allocation will be distributed between the two, only that resources will be allocated in a manner that is aimed at mitigating possible community risks. The aim of the resource allocation is to ensure that the community will regard the MNE as legitimate and thus constitute a smaller risk to its operation (Suchman, 1995); however, if insufficient resources are allocated, there is a greater possibility that the community will take action against the MNE.

If the mining MNE is not regarded as legitimate, despite its possible resource allocation, it can be subjected to the reality of community risk. Community risk can come in the form of actions from communities that impact economic performance, such as financial risks (i.e. loss of economic value), the involvement of political actors who can influence the institutional environment or “rules of the game” (i.e. political risk) (Lou, 2009; Miller, 1992), or cultural risks, which are linked to acceptance of the MNE's activities both on a long-term and short-term basis in the general population (i.e. social licence to operate). What remains unanswered by the theoretical review, and what this PhD study aims to determine, is what types of risk management practices the mining MNEs utilise in order to mitigate community risks and, additionally, what the dynamics are between communities of place and communities of interest when interests coincide, as well as when their interest are opposing.

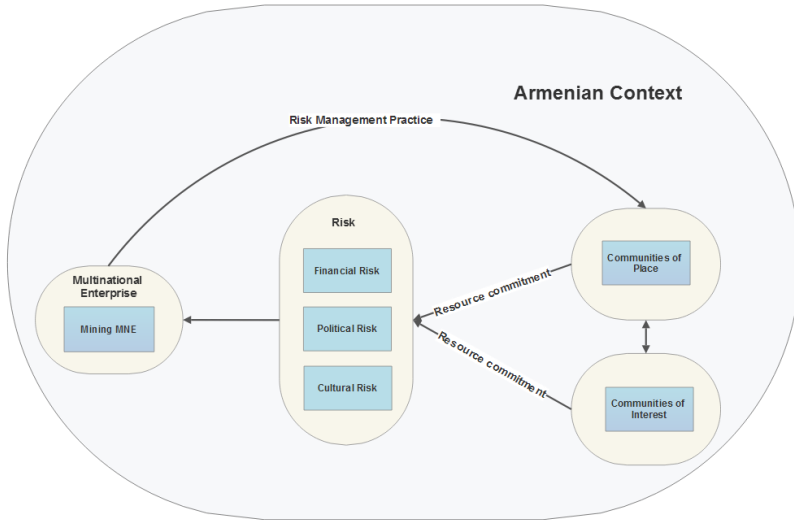


Figure 3. Community risk management based on literature review

1.3.7 Summary

This section has presented a theoretical framework that describes the risks associated with the relationship between communities and mining MNEs. It is argued that risk can be conceptualised through the concept of sensemaking and the way that people create meaning about events in their physical and social environment. In order to understand community risk, it is argued that one needs to know how both mining MNE managers and community members create meaning. Because it is cognitively impossible for us to process all information, we rely on our ability to make sense of possible risks rather than the accuracy of our decisions, based on cues in our environment and on our estimation of the plausibility of a favourable outcome. Three types of risk are presented that the MNE can be exposed to: financial, as in loss of financial value; political, as in interference in business continuity by political actors; and cultural, as in the loss of the social licence to operate. For these risks to materialise from a community risk perspective, the community needs to make sense of the mining MNE as lacking justification for its actions and, based on this, take actions that threaten business continuity. Community risks are managed by allocating organisational resources that will influence how communities perceive the legitimacy of the mining MNE, the lack thereof being perceived as

being associated with higher risk, while being regarded as trustworthy is related to low risk exposure. In order to distinguish between local communities directly affected by mining and other forms of community, a distinction must be made between two types—communities of place, defined as communities geographically near the mining MNE’s place of operation and which evaluate both the risk and opportunities of a given mining project, and communities of interest, which are groups with an interest in the activities of the MNE, and which engage with the company as either a risk or an opportunity.

1.4 Methodology and methods

The methodological challenge of this thesis is to combine two seemingly incompatible domains that from the outset have very different ontologies, one being the international business literature that mainly has a positivistic economic tradition and the other a sociological approach to risk that finds its roots in the constructivist domain. I argue these can be combined through the use of a methodology that includes both objectively identifiable risk events and evidence of how risk managers and communities make sense of changes in the communities that are affected by mining operations. This triangulation methodology is inspired by Geertz’s (1973) idea of thick description, an approach which draws large conclusions from small but very densely textured facts obtained through the use of rigid methods. In order to support broad assertions about the role of risk in the relationship between mining MNEs and the local communities they affect, one needs to be deeply engaged in both them and their surroundings, thereby gaining insights into concrete risk management strategies and their rationales and consequences, and also gaining insight into how mining MNEs mitigate localised community risks and the social and physical environment that shapes this process. Thus, an abductive approach has been chosen where a theoretical model is constructed and subsequently tested through fieldwork observations, archival research and interviews, leading to a revised model for how mining MNEs manage community risks. This will enable me to answer the main research question of how mining MNEs in Armenia manage community risk not by reducing complexity but by embracing the multifaceted environment in which this relationship exists.

The following section includes the methodological approach and the methods used in the PhD thesis in order to describe the processes involved when mining MNEs manage the risks originating from communities of place. The strategies that mining MNEs in Armenia are using is investigated by means of a multiple case study design (Poulis et al., 2013; Yin, 1994), desk research, onsite observations, and in-depth interviews with communities and MNE managers

who provide key insights into these companies' community risk management practices. This section is divided into two parts. Section 1.4.1 outlines the process of collecting data through desk research, interviews with mining MNE managers and communities of place and interest representatives, and onsite observations at mining and community sites (see Appendix 7.5 and 7.6 for examples of observations and a list of sites). It also includes a discussion of validity and reliability when doing research in areas where access to respondents can be challenging, and the steps taken to ensure rigour in the approach, along with an account of the data collection process (Healy & Perry, 2000). Finally, the section describes the process of handling the collected data and the use of thematic coding of interviews. Section 1.4.3 argues that this approach places the thesis within the philosophy of science that can be described as critical realism based on the use of a multiple case study design and the identification of key mechanisms guiding risk management practice.

As described in the introduction, the primary empirical evidence for this PhD comes from fieldwork in Armenia collected in the period between 2014 and 2016. From a methodological perspective, the context provides an excellent platform from which to conduct a study on the relationship between mining MNEs and communities. Here, a significant proportion of the mining conducted is happening in close geographical proximity to villages and towns, and sometimes within these communities themselves, thereby providing insights into the consequences of these operations, as seen in Kajaran, as well as how reliable the communities, such as Saravan, are on the local mine for social and economic development.

“Kajaran city had been considered as mountain metallurgy centre and Kajaran Cooper Molybdenum Company wasn't a candy factory, although even candy factory had negative impact on ecology, but we were dealing with mining factory, in other words, the gas emissions, dust, resulting from petrol exploitation of machinery and equipment. In addition, there were specific specialty related diseases, which were specific to such factories; as a result, there would be vivid changes in the gens of generations.” (Interview in Kajaran, 2015)

“Due to the joint efforts of Saravan village municipality and Geoteam CJSC, gas have been supplied to village through newly built 8 km gas pipeline, which connected Gndevaz and Saravan villages. The company renovated the internal and external water lines and sponsored the establishment of local dance group, repaired

water network, the network hadn't been repaired for a long time and they built the water irrigation system, which was previously missing in Saravan village, currently the village needed additional financing for making the irrigation system accessible to villagers" (Interview in Saravan, 2015).

Armenia is a culturally homogeneous country, as more than 98% of the population is made up of ethnic Armenians who share the same cultural, historical and religious background. A homogeneous national context makes it possible to compare cases and not have differences in culture, norms and values determining external causal factors guiding behaviour, and therefore results. The only form of mining conducted in Armenia is open pit mining, which is considered a form of mining that is intrusive on local communities and entails significant changes to the environment (Monjezi et al., 2009), as illustrated by the quote from the Kajaran interview. There are a limited number of MNEs operating in the country and their activities centre primarily on two types of ore, copper and gold. The MNEs in the case study engage in similar types of operations and are therefore comparable, eliminating differences in type of mining activity as a cause of risk. It was also possible to gain access to MNEs, civil society actors and government officials due to the positive approach and helpfulness of the Armenian government.

There were, however, methodological challenges that affected the process of collecting data and gaining access to remote areas in this type of environment. Working with mining companies and their effect on local communities has never been easy, and multiple cases show that there are issues related to gaining access to valid and reliable data (Horowitz, 2010; Kemp et al., 2012; Raufflet et al., 2014). A suitable methodological approach was therefore needed to gain access to data in this environment, including a systematic approach to handling data and ensuring validity. The following section is an account of how the context of mining MNEs in Armenia was approached and the methodological deliberations that went into the choice of methods.

1.4.1 Method and data collection

This section provides a thick description of the process of gathering data, its rationales, and actions taken in order to gain insights into the specific problem areas and access to key informants from both inside and outside the mining industry. Three types of data collection were employed: archival evidence, interviews and observation. The archival data were gathered from available public information sources as part of the preparation for the individual case studies

(Eisenhardt, 1989). The collection of this form of evidence was concentrated on gaining information on each of the individual mining MNEs and the institutional environment in which they operate. The mining MNE data focused primarily on their self-reporting and news about their operations in the media. This was supplemented with information from sources in the Armenian government, the World Bank and institutional investors. The archival data were supplemented by a series of interviews which were carried out either in the capital of Yerevan or at the mining site(s). The respondents were mining MNE managers, and members of communities of place and communities of interest, such as civil society actors, experts and government officials who had an interest or insight into the industry. Finally, observations were carried out at both the mine sites and in individual villages and towns with the aim of validating the information collected through the archival research and the interviews (see appendix 7.5).

1.4.1.1 Archival data collection

The archival data included data on all the mining MNEs that were active within Armenian mining (nine in total) and the institutions that affected or could potentially affect their behaviour. Over the research period, there were some changes in the ownership structures of a number of companies (Appendix 7.7 for an overview of mining MNEs), but the location of the mines, near various communities, has remained constant. While the mining MNEs are different in regard to home country, ownership structures, use of systems and standards, their management and so on, they are all subject to the same physical and social environment in Armenia, with little variance across the country. Specifically has ownership structure been regarded as an important factor when determining corporate entry strategy and behaviour in host countries (Dunning, 2001). However, when doing analysis on a micro level, as in this case, these factors are less salient as the specific context, local (formal and informal) institutional pressures and local knowledge becomes more important (Gammeltoft et al., 2010) The archival data contributed by providing information on each of the mining MNE/community of place relationships, the mining MNEs themselves and their use of management and governance systems, and insights into the impact of the institutional environment affecting both mining MNEs and communities of place.

The archival data also enabled the identification of communities of place, their geographical distance and the physical impact of the mine. The geographical proximity of the mining MNE and phase of the mining project gave an indication of the potential impact on communities of place. Some of the mining sites (Centera Gold, Orogen Gold, Unity Gold and

Fortune Oil) were relatively distant from their community of place and their operations were small, or they were in the exploration phase of their project, while the remaining mines (Cronimet, GeoProMining, Vallex Group, Lydian International and Dundee Precious Metals) were located inside the community or within a radius of a few kilometres. By using archival data about those mining MNEs that were situated close to communities of place, it was possible to obtain insights into the type and scale of operations that affected the communities and the events that had affected the relationship in the past and caught the attention of the media or news channels. Furthermore, the data provided insight into the different approaches the MNEs had to communities, based on variables such as home country, type of operation, the age of the mine, number of employees and mining location. These data were used when analysing plausible explanations for the existence of causal powers that affected the relationship between the mining companies and communities of place.

Third, the archival data provided insights into the relationship between the MNEs and the types of management and the governance systems that they utilised to manage their relationship with the community of place. Some of the standards, such as World Bank IFC (with the extractives amendment) or EITI, have an “extractives” focus as part of the system and explicitly mention local communities as a particularly salient stakeholder group (EITI, 2015; IFC, 2015), while others, such as the UN Global Compact, take a more general approach to the social and environmental impact that these companies have (UN GC, 2016). Other approaches used by mining MNEs included systems created by the mining MNEs themselves, but with an added component of community engagement or CSR. The use of standards and systems made it possible to gain knowledge about how mining MNEs engaged with the communities in their geographical area and the types of activity this entailed.

Fourth, insights into the institutional environment were gained from the Armenian government, news sources and country reports from various national and international sources. These provided insights into the strength of existing institutional structures. By concentrating on the relationship between mining MNEs and communities of place, it was possible to uncover how economic, political and cultural institutional structures shaped specific events and the relationship between the two. Given the risks described in the MNE literature (Chapter 4), the focus was on the degree to which these institutions were able to enforce their own rules, and on their level of legitimacy with both the MNEs and the different stakeholder groups, such as their efficiency in enforcing the Mining Code (2011) or how political actors interfered, favouring either mining MNEs or the community of place. The archival data could also be used to specify

questions used in the interview guide. The review of the literature provided a framework of the most common impacts of mining activities on communities of place. The archival data allowed questions related to specific types of risk event associated with mining to be added to the interview guide.

1.4.1.2 Using an exploratory approach

The archival data provided useful information on the mining MNEs' overall management approach when confronting community grievances, as well as location and insights into how communities have reacted in the media when impacted by mining operations. In order to gain qualitative insights into the management of community risk, it was necessary to interview and observe how these types of risk were managed and how communities perceived and reacted to management decisions; however, in order to achieve this, an exploratory approach was needed. Approaching the research subject in this way is in line with the case study design as a way for the researcher to purposefully explore a certain object without knowing its concrete form but by setting a direction and purpose, as well as delineating when the exploration can be judged as successful (Yin, 1994, p. 29). In this case, the purpose was to gain insights into the mining industry and its approaches to risk management as practised by MNEs in Armenia. It was also used to obtain an understanding of how mining impacted the lives of communities of place and how communities of interest reacted to the presence of mining operations. The concerns at this stage in the process were whether access would be granted to the mining MNEs, which were rumoured to be closed to outsiders, and whether the different communities would regard the research as independent, which could influence their willingness to talk openly. While both concerns to some extent were well founded (it was hard to get interviews with most of the mining MNEs, and communities did question the legitimacy of the research), the exploration phase of the project did give me time to build trust with both informant groups, which proved useful when the final interviews were conducted.

1.4.1.3 Planning of fieldwork

Starting the project with no past experience or contact with either mining companies or local communities in Armenia made it necessary to cultivate relationships with what were believed to be key informants. Having the support of the Armenian Embassy to Denmark created some breakthroughs in the beginning of the process and, together with prior personal contacts in the country, it was possible to slowly get access to some of the key people

surrounding and within the industry. While writing to these informants was part of the process, it was through personal connections and referrals that most of the final meetings with industry and government officials were actually arranged (see below, section 1.4.1.2-4). Planning the contact with local communities required a somewhat different approach. In the beginning, NGOs were the most willing to help gain access to the local community sites, but as they are very much part of the narratives created around mining projects and therefore a possible source of methodological uncertainty, alternative approaches were also needed in order to insure validity and reliability of the data (Healy & Perry, 2000). Therefore, a permit was obtained from the Ministry of Regional Affairs that could be shown to community heads and mayors and which explained that the project was officially sanctioned by the Armenian government and that any assistance would be highly appreciated. Based on this approach, where multiple “seeds” were contacted, the fieldwork commenced in the hope that these initial contacts would lead to more referrals and possible informants. The findings from this work are mainly presented in the last two papers, Chapters Five and Six.

1.4.1.4 Accessing “hard to reach” places

The challenges faced in observations and conducting interviews were mainly associated with the geography and politics of Armenia and the legitimacy of the researcher. While the chain referral approach did provide some security (Atkinson & Flint, 2001), there were also challenges that were outside the control of people with whom I had direct contact (Amour, 2012; Dixit, 2012). Other researchers have investigated approaches to conducting research in conflict zones or “hard to reach” areas, taking into consideration logistics, politics, methodologies and ethics (Bush & Duggan, 2013). While most of Armenia is not considered a conflict zone, there are areas of the country which are at times unsafe due to the volatile and often conflictual relations with Azerbaijan (De Waal, 2003; IMF, 2016; Kambeck & Ghazaryan, 2013). By taking a precautionary approach to my presence outside the capital, Yerevan, based on a worst-case scenario approach, I attempted to ensure that the research could be done in relative safety. Logistical challenges were mainly associated with access to and quality of roads, road safety and sites close to the border that could potentially be under fire. Politics can play a role when there is competition for power at the local level or between regions, and this can influence the research either because it is perceived to “take sides” or because the presence of the researcher is used to leverage certain stakeholder agendas. Methodologies used in conflict zones follow the approaches seen in non-conflict zones; there are, however, a few differences.

Transparency is central, as rumours and gossip quickly become “fact” in areas where real information is often scarce and often politicised (Haer & Becher, 2012). Accountability towards the informants is also central, especially Community of Place members, as they are often taking a risk in talking to you about sensitive subjects. In small villages, rumours circulate quickly about who is talking to whom and what they are saying; therefore, being accountable for one’s actions and understanding the role of the researcher in the specific context is important.

This leads to the final domain, which has to do with the ethics of the researcher. Ethical dilemmas are a fact of life for all researchers, regardless of whether or not they are working in a conflict context, and the same types of challenges are faced in both types of environment. However, in a conflict zone there can be differences in the consequences of unethical behaviour, not only for the researcher but also for the people who are in supporting roles. A series of guidelines and principles have been produced for doing fieldwork, but none of these are specific to conflict zones and they leave the individual researcher to evaluate what principles to apply (OECD, 2008; UN, 2006). As stated in the OECD (2008) guidelines, “Evaluators should keep in mind that the way they act, including both the explicit and implicit messages they transmit, may affect the degree of risk” (22), which provides little guidance in terms of what to do on the ground.

In practice, the concerns raised in the four domains were mitigated through the planning process, where media outlets and personal informants provided valuable insights into the situation on the ground. Logistical issues were confronted by hiring local drivers, typically with military experience, and getting a qualified Armenian-English speaker who could be trusted and did not have personal ties to the site who was called upon to act as an interpreter and all round “fixer” on the ground. Typically, the “fixer” was contacted a few weeks before the fieldwork was about to start and together we created a preliminary plan discussing the situation on the ground and who to hire as driver. When the fieldwork finally commenced, there was a rough plan of whom to speak to and where the interviews and observations should take place, as well as room in the plan if something unexpected should occur (see Appendix 7.5 and 7.6 for examples of observations and a list of sites). Most of the political issues could be confronted before the fieldwork was initiated by using “seeds” in the local villages or by taking people of authority with me. Support from the government and thus the ruling party in the country also facilitated this process. Having strong governmental support can also in some cases be counterproductive in terms of gaining access, so when contacting informants it was always emphasised that this was independent research funded by the Danish government and that

neither the mining industry nor the Armenian government was directly involved aside from their participation as key sources of data. Methodological transparency and accountability were ensured through the use of a silo-based approach to the data from informants. Participants were all briefed on the purpose and outline of the project and interviewed using the same interview guide, which was based on a series of initial exploratory interviews conducted at the start (details can be found below section 1.4.1.5); however, none were informed about what other respondents had said or who they were. This ensured transparency about the project and ensured that specific information about individual respondents was not shared in a way that made it possible to identify the individual.

Working in this type of environment causes ethical dilemmas to arise as one becomes aware of different forms of violation, gaining access to privileged information and becoming sympathetic to some of the respondents. Engaging with the mining industry is not without its consequences and the social, environmental and financial changes caused to society by mining are profound, not least on the Community of Place level (see Chapters Five and Six for specific examples). There is a real chance that the researcher will become engaged in one of more of these concrete cases where mining has caused some damage or been the cause of injustice in the eyes of one group. The research perspective on the mining MNE and its management practice towards community risks provided a basis for how to deal with these adverse consequences and made it possible to psychologically distance oneself from the object being observed. Having this clear perspective on the research subject of communities as a source of risk meant that it was possible to differentiate between how I as a researcher felt about a given event and to what degree it was regarded as a risk to the business continuity.

The challenge of this PhD thesis has in this way not so much been gaining access to “hard to reach” places, as in the case of Armenian mining MNEs or communities of place, but rather in the collection of reliable data. Getting good empirical evidence has hence proved a key challenge, especially in a research environment which is associated with a high level of uncertainty. The following section provides insights into how data were obtained through interviews and observations.

1.4.1.5 Respondents and structure of semi-structured interviews

Interviews with mining MNE managers, communities of place and communities of interest were used as the source of primary data in the thesis (see Table 2 for an overview of respondents). Two processes were involved in the data collection: contacting and arranging

interviews with respondents and the interviews themselves. The meetings with respondents were organised using a snowballing or “chain referral” approach (Beauchemin, 2011; Dixit, 2012), consisting of selecting a sample of “seed” individuals to start the survey, as described above, and then asking these “seeds” for additional contacts in order to reach other people in the population of interest (Vogt, 2005). This form of approach is considered the most efficient way to reach hidden or “hard to reach” populations such as mining communities, and to gain access to mining MNE managers (Cohen & Arieli, 2011). Both types of respondent often have little trust in outsiders and have been known to be reluctant to talk openly about the problems they face (such as community risks). As personal security was also a concern in the Armenian context (see section 1.4.1.4) for both respondents and the researcher, the use of the chain referral approach was a possibility to build trust and the commitment needed to gain secure access to respondents. Trust in the interviewer is especially significant when establishing contact with relatively closed populations where outsiders are not always welcome, such as communities of place or mining MNEs.

Snowballing has some important drawbacks that need to be taken into account when evaluating and analysing data collected using this method. Using convenience sampling such as snowballing for data collection has limitations, as it can result in selection bias, thereby “tilting” the results in one direction (Atkinson & Flint, 2001). This danger was minimised by using independent “seeds” from multiple sources, including “seeding” from university researchers, government officials and representatives from communities of interest, NGOs and contacts within the industry. Having multiple entry points meant several contacts in each MNE or community of place case, thereby making it possible to conduct several interviews with independent sources who were referrals from different “seeds.” Using multiple contact points for respondents confronts two issues with the validity of snowballing: first, the problem that the sampling is not random and, second, that the collected data are biased towards individuals that are interrelated (Haer & Becher, 2012). The data from interviews were collected from a relatively small pool of respondents, including those from villages, small towns and a number of mining MNE managers. The effect of non-random sampling was therefore limited, as the total population was a relatively small number of mining MNE managers and members of communities of place. The challenge of having interrelated respondents is, however, more pressing, as it could provide results where responses lean towards a particular bias. The possible issue of bias in the sampling process was mitigated by utilising multiple cases that were not interrelated in terms of geographical area, mining MNE managers or members of communities

of place.

The snowballing approach meant that it was possible to conduct interviews with mining MNEs, communities of place and communities of interest, experts and government officials (see Appendix 7.4 for a list of respondents). In total, fifty interviews were conducted either with individuals or, in some cases, small groups. The primary line of enquiry concentrated on the mining MNE and community of place relationship; a second line was focused on the environment surrounding this relationship by groups with varying degrees of direct involvement. Five categories were created. These were mining MNEs and communities of place, as the two central actors; communities of interest, which have a direct interest in the relationship and how it evolves; government officials, who have an indirect interest in the institutions that are governing the environment of the two actors; and finally, experts, who have no direct or indirect involvement in the sector but act as observers of the behaviour of the two central actors.

Table 2. Overview of respondents

Interview	Number of interviews	Number of respondents (individual or group)
MNE	5	6
Local community	9	17
Civil society	13	13
Government	6	6
Expert	17	17
Total	50	59

MNE representatives included vice presidents, operations managers and foreign mining specialists. Five MNEs (Cronimet, GeoProMining, Vallex Group, Lydian International and Dundee Precious Metals) were prioritised, as they had communities of place geographically close to at least one of the MNEs' mining operations. Interviews were obtained with managers of the remaining mining MNEs, both at the subsidiary headquarters in Yerevan and, for some, at their onsite locations at the mine(s).

The second group included communities of place (see list in Appendix 7.4) that were situated close to the mining projects. The environmental assessment reports of the five MNEs

were used to identify distinct communities which they saw were or would be affected by their activities. Civil society organisations later verified the specific communities as being near and affected by mining operations. Each of the communities was contacted through the Armenian Embassy to Denmark and the Ministry of Regional Affairs, who ensured that village heads and mayors were available for interviews at a pre-set time and place in the community. Because there was a chance that data obtained through these official channels could be biased towards the mining MNE or government agendas, interviews were also arranged through civil society organisations and local contacts, in line with the multiple seed approach.

Communities of interest made up the third group. The group varied from NGOs that focused on a single mining site to World Bank representatives who were working with the Armenian government to strengthen the legislative environment around mining. Interviews with communities of interest included fourteen civil society and international non-governmental organisation actors working with different aspects of the impact of mining on villages and towns. The interviews were also used to obtain further opinions on statements made by communities of place and mining MNE representatives, as they had a particular interest in conveying a certain narrative about the performance of mining companies. Some of the respondents were interviewed several times, as they provided insights into events at some of the major mining sites.

The fourth group targeted for interviews was government officials who were responsible for ensuring the implementation of the mining code in Armenia and that MNEs were adhering to legislation. There were six interviews with officials from the Ministry of Energy and Natural Resources and the Ministry of Economy, and with representatives from the ruling political party. The aim was to establish an idea about the institutional environment (external causal powers) within which the MNE were operating and their perspective on the impact on communities of place. The interviews were conducted using the interview guide, supplemented by exploratory questions, as who often did not have local knowledge about individual communities but knew more about the impact of policy.

The final group of respondents comprised experts on different aspects of the mining industry; the information they provided was used to verify the elements put forward in the other interviews and the archival data collection, and to provide insights into how the local institutional environment (external causal powers) impacted mining companies. There were seventeen experts, including academics at the American University of Armenia and Armenian State University who were undertaking research on the environmental impact of mining on local

communities. Experts also included institutional investors who were involved in resource investments and who could provide insights into the criteria used when evaluating investment risks.

The semi-structured interview is, in combination with observation, a proven technique that allows exploratory follow-up questions about topics unanticipated by the interviewer, facilitating the development of a subtle understanding of what happens in the case and why (Fletcher, 2016; Mabry, 2012). The techniques facilitate the penetration of unknowns in the case and rely on the researcher to recognise the importance of new input, to generate questions and to maintain curiosity rather than jumping to conclusions. Of the 50 individual interviews, 16 were exploratory, where questions were based on the literature review, and 34 used the final interview guide (see Appendix 7.1). The first set of exploratory interviews followed a line of questioning on the relationship between MNEs and communities and was based on literature that had previously engaged with mining/community relations (Davis & Franks, 2014; ICMM, 2015; Kemp & Owen, 2013). The primary focus was on uncovering changes in the relationship that were financial, political or cultural in nature, as identified in the MNE risk management literature and the initial model. No formal interview guide was used, as it opened up possibilities for different descriptions and narratives on the relationship and impact of mining MNEs on communities. Utilising the 16 exploratory interviews before the final interview guide was created helped identify questions which were deemed important in the specific context of Armenian mining. This approach enabled the prioritisation of items that were important in the relationship as well as prioritising questions that produced nuanced answers and thereby captured critical details. A couple of examples of this were when the respondents were asked “Do you believe that the project is legal?” In the exploratory interviews, respondents almost always answered “yes,” while when asked about economic changes the questions became more nuanced “Have you been able to buy more or less since the project started?” and “Has access to good roads, electricity or telephones changed since the project started?”.

While the interview approach continued to be semi-structured in nature, the questions were more specific and closely related to the issues confronting the communities of place that were affected by mining activities. The interview guide focused on five general themes of change associated with mining and communities of place. These themes emerged when the first exploratory interviews were conducted and respondents bore witness to the different changes that have followed mining. The first line of questioning enquired about cultural risks and was labelled “social and cultural change.” These questions concentrated on changes in crime levels,

corruption and family patterns, and how the sense of place had been affected. The second group of questions was related to financial risks, and labelled “economic change.” The questions concentrated on how the mine had affected the financial stability of the community of place. Differences in income levels between community members, local inflation and the general economic situation were of particular interest. The third line of questioning was focused on the socio-environmental risks to the community of place as different respondents experienced them. This group of questions was named “socio-environmental change” and was directed at the perception of change in the levels of dust pollution, access to clean water, noise and vibrations caused by mining. Questions were asked about the effect of resettlements and compensation for the loss of housing or agricultural land. The fourth group of questions was related to political risks, with a particular focus on changes in the community and municipality level governance structures. The involvement of local political actors and participation of members of the community of place were of special interest. The questions centred on the belief that members of the community of place were adequately involved in the process of establishing the mine or later changes made to its geographical location. Other questions centred on the perception of the project as being legal, and whether there had been any action taken by the community of place in the form of demonstrations or violent actions. The fifth and final theme enquired about the risks associated with the process of change itself. Under the label “process of change,” questions were asked about the feeling of consent to the changes experienced by the community of place, participation in the process and how conflict resolution was carried out regarding accessibility, transparency and dialogue.

In the first question within each theme, the respondents were asked to quantify the impact on the village or town as a whole on a scale from one to five. The use of the Likert scale ensured that it was possible to evaluate the severity of changes in the community of place from the respondent’s perspective. While these measures were not directly used in the papers, they did provide validity to the following statements in the interview by hindering misinterpretation of statements. For example, one interviewee could present a strong narrative about how a given event had impacted his or her life, but the overall evaluation of the project was that the changes were marginal or limited. The last question centred on how the respondents perceived the direct involvement of the MNEs in facilitating these changes. Finally, respondents were asked if there was anything that they wanted to add which they had not had the opportunity to say.

All interviews were subsequently transcribed (see Appendix 7.2 for an anonymised example of a transcribed interview) in a format that ensured that coding could be carried out and

comparison made between responses to individual questions. The transcription process was done as close to the date of the actual interview as possible, helping the researcher recollect the context in which interviews were carried out. The approach made it possible to use observations directly (See 1.6.1.6) and thereby substantiate the answers from respondents.

1.4.1.6 Use of observations

By visiting the mining sites and villages, it was possible to witness and record how changes to the community had impacted village life both positively and negatively. Observations in combination with interviews are a central part of the case study approach (Eisenhardt, 1989). Making observations increases confidence in the findings of interviews and keeps the researcher from arriving at conclusions prematurely. In this way, observations can add to the empirical grounding of the conclusion and ensure that conflicting perceptions do not lead to premature closure. The researcher can thus build confidence in the findings and increase the likelihood of surprising results that will lead to new or more nuanced discoveries. “Observation is the act of noting a phenomenon, often with instruments, and recording it for scientific purposes” (Angrosino, 2011, p. 53). In this case, the observed phenomenon was the themes and events explored in the semi-structured interviews; the instrument through which these observations were documented was through note taking and photographs. For example, to verify one of the interview questions (Question 2.e.) about how the mining project had affected the economic situation of the community, the respondents were asked to show the interviewer around the community of place, thereby enabling a documentation of changes to the infrastructure, such as roads or the establishment of gas lines, etc. (for example observation 7 and 10 in Teghut village found in Appendix 7.6). The data include the date, a short description of what is seen and finally the photo itself.

1.4.1.7 Limitations in the data collection process

The thesis’ effort to combine two seemingly incompatible domains, an objective stance following the traditions in the international business and risk management literature, and a subjective and sociological standpoint on risk and communities presents a series of methodological challenges. A starting point is how to measure meaning when doing interviews and observations. Working from a conceptualisation of risk as a creation of meaning presents a problem when it comes to how to measure risk, knowing that the risk to business continuity from communities is real but at the same time unquantifiable. While the philosophy of science grounding this research (1.6.4) is an effort to ascribe measurability to the conclusions, it

assumes that there are specific mechanisms guiding meaning and that cues to these are in the number and strength of causal connections in the empirical material. This stance limits the study, as it is impossible to measure meaning; it hence relies on how the respondents formulate and describe their sense of what is real in their social and physical environment and not necessarily objective facts. They can explain this reality as they sense it and not necessarily how one would objectively identify it. Observation lacks some of the same characteristics, but here the limitation is axiological, centred around the researcher's interpretation and the objects being observed. The second limitation is also related to who was actually being interviewed. It is not an easy task to acquire access to individuals from mining sites and communities who in many of the cases in this study were suspicious about the nature of the research, what conclusions would be drawn and not least if information would be disclosed that could identify them as individuals. One of the presumptions was that respondents would be reluctant to reveal full truths but that they rather would provide information that furthered their version of it. There was, therefore, a need to ensure that data from interviews could be substantiated with some form of physical evidence or independent testimonials that could support main points. It was of course not always possible to get this form of evidence, which created a dilemma regarding how to handle the information—if it should be included or excluded in further analysis. At the same time, it made the well-documented narratives with multiple sources even more salient, risking that these would dominate the conclusions drawn from the analysis. Some of these issues could be rooted out through the use of a philosophy of science that takes such uncertainties into account, as well as through thematic coding through identification of commonalities across interviews and individual cases. The data collection's main limitation hence rests with the relatively limited number of respondents, the potential unrepresentativeness of the sample, and to what degree respondents' answers were substantiated by other sources or observations. Significant efforts were made to confront these limitations, both in the research design and the analysis, but nonetheless they do present an element of uncertainty that constrains the thesis' contribution.

1.4.1.8 Development of coding schema and thematic coding

Thematic coding of interviews is a well-established approach when working with case studies, and when working with several independent cases where the aim is to identify commonalities (Flick, 2009, p. 330), as in uncovering management practices and risks. The process of identifying specific themes across cases and multiple interviews involves a series of interrelated steps. They specifically sought to determine changes to the community of place and

the actions of the mining MNE as described by all stakeholders in the process (see appendix 7.5 for an example of coding). It was hence possible to compare responses through the use of thematic coding, both on the individual mining MNE/Community of place cases as well as how other actors perceived the industry.

The thesis applies a deductive approach to the thematic coding, based on a predetermined series of grouped indicator words. The coding schema was developed based on the literature review on mining MNE/community relations and risk management as well as the initial 16 exploratory interviews. The aim was to identify words or categories of words (themes) that characterised the relationship between mining MNEs and communities—for example, “corruption,” which is a well-described problem in the literature on extractives and their impact on society (Bebbington et al. 2008), and “conflict resolution,” which has to do with community engagement programs (Franks & Cohen, 2012). In total there were some 162 words identified in the review as indicators that in one way or another impacted the relationship. The words were grouped into categories or themes that were used when doing the coding (see table 3 Coding theme).

In practice, this meant the inclusion of a series of criteria in the thematic coding that identified specific themes that are unique to the relationship between mining MNEs and communities. The theme structure produced a code that broke the interviews into one of five categories, namely social and cultural, economic, social-environmental, politics and governance practice, and the process of change itself. For example, answers related to domestic violence were placed under the social and cultural change theme, and the ones related to employment under the economic change theme.

Table 3. Coding scheme

Category/ Theme	Change event codes described in the interview
Social and cultural	Corruption; domestic violence; sexual violence; substance abuse and trafficking; prostitution; change in social norms, disease; vehicle accidents; spills; controlled release; breakdown of traditional roles; changing production/employment base; community cohesion; effects of cash economy; sense of place; community leadership; cultural heritage; disproportionate or particular effects on women, children; disabled; elderly; ethnic minorities;

Category/ Theme	Change event codes described in the interview
	indigenous peoples
Economic	Employment; compensation; training; profit flows; equitable distribution (across state/regional/local/ethnic/class/family or other lines); royalties and taxes; inflation/deflation: e.g. housing (ownership/rents); food; access to social services; demands on/investment in roads, rail, ports; procurement, quality, service areas
Social- environmental	Pollution (source of or sink for), air (dust); water (acid and metalliferous drainage, cyanide, tailings seepage, riverine and submarine disposal); soil; noise; scenic amenities; vibration; radiation; traffic; land; water (groundwater, river, ocean); mineral resources; cultural heritage; forest resources; consent and consultation in relation to resettlement; compensation; ties/relationship to land; equity; adequacy of resettlement housing and facilities; livelihoods; disruption (including exploration); frequency and timing; compensation
Politics and governance	Political; local governance; contracts; devaluation of currency; tax collection; conflict resolution; legislation; permits; courts impartiality; enforcement; protection; compensation; courts system
Process of change	Sovereign consent; community consent; development of programmes; monitoring; selection of alternatives and technologies; planning operational aspects; dispute resolution; company level grievance mechanisms; accessibility; transparency; dialogue and engagement; third party mechanisms
Other	Others

Software designed for qualitative and mixed methods research, including thematic coding, was used to do the coding itself (NVIVO, 2017). The coding schema was used as a checklist that would identify specific words (or their synonyms) in the transcribed interviews. Using this approach enabled the relatively easy identification of themes that the respondents gave evidence of but also enabled identification of when themes overlapped, for example, when communities talked about their ability to make an independent decision without the explicit or tacit interference of the MNE—for example, when the mayor of Kajaran said that:

“Zangezur Copper Molybdenum Company had a monopoly position in production and processing of copper and molybdenum. I estimated the change to the local community social and cultural life as positive 5 (Editor: From a scale from one (none) to five (huge)) and added that there couldn't be any other alternative response since Kajaran city got recognition as a result of Zangezur Cooper Molybdenum Company's activities. Kajaran city conditioned its future with the activities of the company.” (Interview in Kajaran, 2015)

This example illustrates an overlap between politics and governance of the town, its economic dependence on the mine and the activities that the mining MNE engage in. Another example came from Saravan village who stated when asked about the changes the culture in the village:

Due to the joint efforts of Saravan village municipality and Geoteam CJSC, the gas was supplied to the community through a newly built 8 km gas pipeline, which connected Gndevaz and Saravan villages. The company renovated the internal and external water lines and sponsored the establishment of a local dance group, repaired the water network, the network hadn't been repaired for a long time and they built the water irrigation system, which was previously missing in Saravan village, currently the village needed additional financing for making the irrigation system accessible to villagers. (Interview in Saravan, 2015)

Here the villagers do not answer the question directly (at least initially) but talk about the impact Lydian International has had on village life. They chose to answer the question by referring to the impact on infrastructure and the “sense of place,” which has to do with the theme of social and cultural changes. The communities' reference to their sense of belonging was an important finding, as the respondent later talked about whether the villagers got more or less involved in politics, saying:

It [decisions in the village] was conditioned by the company's interests or other factors, but the company always strived to protect the interests of community members, the employees of the company were conducting meetings with the

community and were interested to find out what kind of projects the locals would like the company to implement, in order to develop Saravan village, end the need to migrate from the village, and create additional workplaces. (Interview in Saravan, 2015)

Through the thematic coding, it was thus possible to identify themes within the individual interviews and across different respondents, which could be utilised in the analysis in the individual papers (chapter 3-5).

1.4.2 Summary

As described above, there are a series of strengths and weaknesses when doing qualitative research using the methodology presented here. The weaknesses are closely associated with the methods used to collect the primary data and to what extent one can be certain that the responses are reliable. Doing fieldwork and using snowballing as the primary approach to getting access to respondents is common in research where there is low trust and lack of a well-functioning communication infrastructure, as in the case of conflict zones. While Armenia is not in direct conflict with its neighbours, there are enough violations of the ceasefire with Azerbaijan to characterise it as a frozen conflict. There are efforts in the research design to confront these built-in weaknesses, but there can always be criticism of whether the sources are credible enough and whether their claims have been rechecked through alternative sources with enough rigour. Especially when it comes to sensitive topics such as the impact of mining, one can be almost certain that competing narratives will exist and there will be claims which are either untrue or cannot be verified, which is illustrated by the first example in the thesis. The strengths lie in the transferability of how mining MNEs manage community risk across different firms and communities of place. By focusing the data collection on the risk event as identified in the themes and how the two main actors (mining MNEs and communities of place) react to these events, it is possible to make comparisons across different entities. While this approach does not mean it will be possible to generalise about mining MNEs' community risk management outside the context of Armenia, it does provide insights into the nature of the mechanisms guiding the relationship.

1.4.3 Philosophy of science

As described in the introduction, this PhD thesis combines two seemingly incompatible

domains, an objective stance following the traditions in the international business and risk management literature, and a subjective and sociological standpoint on risk and communities. In the following section, I will argue that it is possible to answer the overall research question and a match between the two domains can be made through a philosophy of science set within a critical realist framework. Following this section, it is shown how this position relates to the methods used and the multiple case study design employed in the thesis. The framework presented is based on a critical realist stance and focuses on identifying the causal powers and mechanisms prompting events in the relationship between mining MNEs and communities of place. Finally, using the framework, it is argued that valid causal links can be established between the causal powers at work in the single cases and the common mechanisms that are at work when mining MNEs manage community risks. Relating back to the main research question and sub-questions, uncovering the mechanism guiding the relationship between the two enables identification of the “how” in mining MNEs’ management of community risks.

A critical realist perspective has several implications for the principles applied when processing the data collected and making analytical generalisations, e.g., building theory (Healy & Perry, 2000). Critical realism, first, enables the use of a philosophy of science that recognises that an objective world exists independently of people’s perception, language and imagination, and that part of this world consists of subjective interpretations, which affect the ways in which we perceive and experience it. It is possible to investigate these subjective interpretations by analysing what people perceive or sense (the empirical), focusing on the events that occur in space and time (the actual) and the mechanism and structure that are generated to explain how the world functions (the real) (Archer, et al., 1998, p. 16). Second, a case study approach provides a platform for detailed insights into the subject matter (Yin, 1994) and in critical realist perspective is called “causal powers”, providing insights into the mechanisms guiding the behaviour of people and organisations (Edwards, et al., 2014:90). The use of a critical realist methodological approach can offer insights into the mechanisms that apply when MNEs are managing risks associated with their relationship with communities of place. At the same time, it also offers a framework which can be audited by reviewers and thereby ensures the trustworthiness of researcher identification of these mechanisms (Healy & Perry, 2000). The methods used thus have to provide insights into the subjective interpretations of both the MNE managers and the communities of place related to the social and physical change events near the mining site.

1.4.3.1 Critical realism as philosophy of science

Critical realism provides a framework that incorporates the complexity of the research context and a methodological approach to studying MNEs and their relationship with communities of place. A critical realist perspective thus views social phenomena as rooted in conceptual and objectively identifiable events, and the production of knowledge as a social practice which affects how these should be understood (Sayer, 2000). The main research question and the sub-questions can be investigated using this perspective, as they all relate to the relationship between the observed—e.g. the effect that mining has on communities of place and how these communities react to the changes in their environment, which can affect the mining MNE's ability to continue its operations. Uncovering the “how” in both the main research question and the sub-questions provides insights into the risks as perceived by mining MNE managers and communities, the management practices for risk mitigation that are deployed by the mining MNEs, and the relationship between communities of place and communities of interest.

There are three reasons why the choice of a critical realist stance constitutes an ideal framework for studying the relationship between mining MNEs and communities of place. First, critical realism provides an analytical position where multiple realities coexist simultaneously, without subscribing to either a positivistic or constructionist stance (Guba & Lincoln, 1994:110; Healy & Perry, 2000). By introducing sensemaking (Weick, 2001), it is possible to provide an explanation of how different sets of meaning are created from the perspective of the MNE and the community, which in some cases are significantly different. The centre of analysis is, given the sociological perspective on risk, the creation of meaning by MNE risk managers and members of communities, and how these actors perceive the world, rather than solely how these events are objectively defined.

Second, critical realism provides a framework that not only includes objectively identifiable events in the world, but an understanding that these come into existence independently of our knowledge of them (Sayer, 1992). This allows for the analysis of objectively identifiable characteristics of MNEs, communities and risks, but also leaves room to understand the independent interpretation of meaning assigned to them. This is like when people refer to past events which are independent of the current situation they are in and use them as justification for how they interpret a given action or situation they experience. When the security staff were accused of beating up local residents in Teghut, it had more to do with the past experience of the community of place with dust pollution than the unique event itself.

Focusing on the risk event and analysing how the different actors interpret its impact makes it possible to explain how seemingly unrelated events or rumours can play a central part in how a risk materialises.

Third, the perspective assumes that the world consists of mechanisms or causal powers located in our social world whose activation may generate events in the actual domain (Archer, 2010). A single risk event is not necessarily generalisable but needs to be connected with a pattern of similar behaviour in other cases and outside the specific context. However, while we might identify the existence of a causal relationship between different forms of resource commitment and risk mitigation in one case—for example, investments in infrastructure in Seravan (as shown in Chapter Six)—there needs to be a pattern of events resulting in the same outcome in order to say that there is a generative mechanism at play.

The critical realist stance helps to determine which parameters to include when studying phenomena in the social world (Edwards et al., 2014:26). By determining the risks that communities of place can pose to the mining MNEs and how these are mitigated, it is possible to identify patterns of behaviour over time and in different social settings. These patterns serve as explanations for the mechanisms that influence the mining MNEs' behaviour by providing a satisfactory argument for how (risk) events came into existence but also what mitigating actions were taken. Beginning with the sociological conceptualisation of risk (see section 1.3.1) and perceptions of events in the social and physical environment, it follows that we have to do so with an ontology which is sensed and with impacts that are perceived. The mechanisms that bring these events into existence are a result of how people have made sense of their environment and, based on their conceptualisation of meaning, taken some form of action that affected their social and physical world, as when people in Teghut took action on the perception of Vallex as a company that cares little for the local village and community members took action by disrupting the company's operations. In this way, risks are empirical, as they materialise into the sensed world as events representing a change from the status quo. There might be different interpretations of the nature of the implications of this change (for some people, change will be a risk; for others, it will represent an opportunity), but it is a change nonetheless and thus also subject to observation. We also know that there are forces causing these events, but our perception of their materiality might also be different depending on our individual perspective.

Given the critical realist position, there must be a mechanism or enabler for a risk to materialise, which can explain how changes in the social and physical world occur. These

mechanisms provide an explanation that surpasses the specific context and serves as an explanation for future events, in this case the risk management practices of mining MNEs and risks from communities. A mechanism is in this way an analytical framework that can be perceived as real (for example, resource commitment to infrastructure and mitigation of community risk, as described in Chapter Five) and can be subjected to empirical scrutiny and scientifically tested (Archer et al., 1998, p. 34), thereby investigating observable causal indicators that can be explained empirically and providing a feasible explanation for these observations' existence. The critical realist is, however, aware that the observed context of the social and physical phenomenon cannot be isolated from the rest of the world (Edwards et al., 2014, p. 4) and that individual parts, such as the mining MNEs or communities of place, cannot be isolated and studied outside this context. The perception of risk is subjective and is formed by the experiences of MNE managers and members of the community of place and their interpretations of what is real, which is in line with the conceptualisation of risk as sensemaking (described in detail in Chapter Three). The critical realist provides an explanation by envisioning the mechanism of how the enactment of one event leads to the adoption of another (Archer et al., 1998, p. 82), generalising about risk events and their possible mitigation within the specific context being analysed.

The critical realist is critical about claims that all in the physical world should be taken at face value, knowing that there can be multiple mechanisms that affect the outcome of a given event. The aim of research is to generalise not about populations (the empirical), but about the theoretical propositions (mechanisms) which can explain the causal relationship between different actions, and generalisations derived from critical realist research are in this way probabilistic truths rather than absolute truths. Validity is established by a combination of quantitative and qualitative methods that constitute and elaborate views of the issues, events and phenomena being studied (Bisman, 2010). The contribution from qualitative methodological approaches provides richness, depth, density and contextual embedding of data, while quantitative approaches using statistical studies or analyses allow for an assessment of the broader conceptualisation of observed patterns in the dataset. Critical realist research is from the outset inductive (in its search for generative mechanisms), which enables the development of propositions and models, and when mechanisms are identified within specific events or phenomena, it is possible to test them using a deductive approach that unveils knowledge concerning broader mechanisms and tendencies—for example, why the investment of resources in cultural heritage, such as preservation of forests, reduces risks not only in the specific case

but by showing how commitment of this type of resource towards communities of place is related to how they make sense of the changes they are subjected to by a large project such as a mine (see Chapters Two and Five). The populations in this study are the mining MNEs and the communities of place, and the mechanisms are how risks are perceived by the two. Answering the main research question and sub-questions is from a methodological perspective related to the identification of mechanisms serving as explanations for the effectiveness of different forms of risk management strategy applied by mining MNEs in the context of Armenia. Generalisability outside this context is in that sense not possible, given that the collection of empirical evidence centred exclusively on the MNEs, their operations in the country and the communities affected by their activities.

The challenge of methodological design is that it has to relate to an analytical position where multiple realities coexist simultaneously, in a world where knowledge exists independently of our acknowledgement of it, and where generative mechanisms cause events to unfold in the social and physical world. A critical realist stance thus requires that it is methodologically possible to isolate the subject matter (the relationship between mining MNEs and communities of place) as being distinct from its surroundings, while at the same time being aware that there are forces which affect and shape this relationship that are outside their control. The generative mechanisms associated with this relationship are in this way a moving target, as they entail an element of complexity which makes it difficult to attribute their origins to the endogenous or exogenous environment of the two populations (Archer et al., 1998, p. 291). It is not possible to ascribe causality to a mining MNE's management of community risk without understanding the context in which the relationship exists. Given the critical realist stance, a methodological design has to reflect the need to isolate the mechanisms and the external causal powers that affect the behaviour of the two populations. This requires a research design where comparisons can be made between a set of events over which the investigator has little or no control.

The major critique of critical realism is that it provides a framework where “anything goes,” where reproduction is used to assign causal tendencies and ultimately the mechanisms guiding social behaviour (Magill, 1994; Steele, 2005), and that the researcher is easily misled by what are perceived as “laws,” when in fact no such things exist, using whatever evidence is available to provide evidence of connections (causal tendencies) which are non-existent and envisioning mechanisms guiding them that are imaginary or that lack causal powers. While I have made an effort to confront these fallacies in the methodological framework and methods

using multiple seeding, it is a critique which remains relevant and is a possible source of inaccuracy in the findings.

1.4.3.2 The multiple case study design

The multiple case study approach has several advantages when identifying the mechanisms described above (Flyvbjerg, 2006). It provides a clear idea about the subject matter or populations—in this case, MNEs and communities of place—and evidence of the underlying mechanisms that affect their relationship, here conceptualised as a risk.

The multiple case study approach provides a platform from which it is possible to acquire in-depth knowledge about a particular contemporary social phenomenon (Eisenhardt, 1989; Yin, 1994). Three conditions make the case study design useful when working with an organisation's relationship with their environment. First, the research question posed explores a social phenomenon—in this case risk mechanisms—which guides the relationship between two populations. The case study helps to isolate the subject matter and thereby provides a focus for the interactions between the two rather than the particularities in single cases. Second, a case study design can separate outside influences in two ways, by applying qualitative methods through interviewing and direct observations, making it possible to validate findings through interviews with multiple respondents and comparing these to observable events. Finally, the case studies investigate a contemporary phenomenon within its real-life context, where the boundaries between the phenomenon and its context are not evident. It is unknown at the outset which mechanisms will emerge as explanations for the causal powers guiding the relationship between the two populations; therefore, an inclusive approach, which does not exclude particular forms of behaviour, is preferable.

Critical realism provides such an inclusive approach, where the findings are unknown at the outset and will only emerge as patterns of behaviour are identified. The identification of common mechanisms (risk management behaviour) across different cases requires a structured approach that involves multiple cases that, on subjects of importance, operate in similar business environments and with comparable behaviour; however, the contemporary case study design is focused on obtaining knowledge through objectively identifiable evidence and not on identifying the causal mechanisms prescribed in the critical realism stance. It does not mean that broader social phenomena cannot operate through the case, and these influences can serve as explanations for how these mechanisms work through different social actors (Elder-Vass, 2010, p. 48). Utilising the approach of abductive reasoning described above requires the identification

of patterns of social behaviour over time and in different social settings (Dubois & Gadde, 2012). Using a multiple case approach reduces the chance that individual empirical observations are mistaken for mechanisms and reduces the risk of making causal claims about their systematic occurrence as a social phenomenon when they are in fact only applicable to a single case—for example, mistaking tree planting for a risk management strategy while the mechanism in fact has to do with how communities of place relate to their cultural heritage (see Chapter Five). The critical realist researcher utilises several independent cases, as this can facilitate the identification of cross-cutting patterns or demi-regularities (Edwards et al., 2014, p. 172). In this way, multiple individual cases can be used to uncover the relationship between mining MNEs and communities of place, constituting an opportunity to discover the mechanisms that guide their relationship on a case-by-case basis and comparing them with the aim of uncovering cross-cutting mechanisms that these single cases have in common. This makes it possible to identify commonalities that determine how mining MNEs manage community risk, and the behavioural patterns of communities of place that are subjected to change in their physical and social environment.

1.4.3.3 Applying the methodological framework

As stated above, the critical realist perspective provides a methodological framework which enables the identification of mechanisms guiding social behaviour, including both objective and subjective evidence (Bhaskar, 2008, p 4; Edwards et al., 2014, p. 90). Causality within the realm of critical realism differentiates between the objective but unobservable structures that have causal tendencies, the physical objects and events, and the world of subjective meaning creation (Bhaskar, 2008, p. 171; Edwards et al., 2014, p. 203). Causality is established through sensing or perceiving evidence from the social and physical environment and subsequently making logical comparisons with what is already known. Causal tendencies are in this way established through logical retrodution from observations in the social and physical world, making logical claims about the underlying structures that can account for these phenomena. These causal tendencies are considered to be identifiable given the sum of causal powers affecting social and physical structures and with an understanding of how and when these structures work and under what conditions they emerge (Sayer, 2000, p.11). The mechanisms that guide decision-making can be identified by comparing causal tendencies across several events and identifying commonalities and those that can be ascribed only to the individual context or event.

Utilising a multiple case study approach provides the empirical foundation necessary for the identification of those mechanisms which guide managerial decision-making in the relationship between MNEs and local communities. Through the identification of causal powers affecting risk events that have shaped the relationship between mining MNE risk managers and members of communities of place, it is possible to establish the chain of events that led to their emergence. It is therefore possible to imagine the mechanisms that must have come into existence in order for events to unfold as they have, thus showing that there is a causal connection which involves the same mechanisms regardless of observations of how relationships between mining MNEs and communities of place have evolved in isolated cases.

One of the mining MNE and Community of Place cases will serve as an example of how the methodological framework was used. The mining MNE Cronimet is situated close to (and to some extent within) the town of Kajaran (see Chapters Four, Five and Six for details of the specific case). The mine has been operating since before the Soviet period and in this way has had a significant influence on how the town has evolved until now and how it will evolve in the future. Cronimet has been engaged in different forms of activity that have affected communities of place, such as providing local jobs and improving the quality of roads, electricity networks and gasification of Kajaran. The company has also been involved in other types of work such as investment in healthcare facilities, schools, and cultural facilities and events which are not directly related to the operation of the mine. When investigating other mining MNE-community of place cases in Armenia, patterns of such types of activity start to emerge, as similar types of mining MNE behaviour towards communities of place can be observed. The combination of these patterns, coupled with archival information and interview data, subsequently leads to the identification of a mechanism that guides community risk management.

The analytical approach that combines the methods deployed and the philosophy of science stance is divided into three sections. The first section is discussion of the multiple case studies of the mining MNEs/communities of place, where causal factors related to risk events particular to each case are identified. At this level, statements were identified based on interviews and the interview guide describing the relationship between Cronimet and the citizens of Kajaran: for example, when the mayor of the town described the mining MNE—“Kajaran municipality received the company’s support in solution of all issues; therefore, Zangezur Copper Molybdenum Company (Cronimet subsidiary) was the aorta of Kajaran city”—or when describing the consequences of increases in economic welfare on crime levels: “Even in such communities as Kajaran city, the increased financial resources resulted in

increasing negative impacts on community. Given insufficient social conditions in community, the improvement of social conditions would definitely result in crime.” Statements like these are seen as having causal powers, as they link the actions of mining MNEs’ decisions to consequences in the local community. Based on the interview guide structure, several similar statements surrounding this case and across different cases were collected and thematically coded using the coding schema (Table 4).

Second, variations and similarities in the statements are compared between cases with the aim of identifying causal tendencies. Using the example above, where the resources committed by Cronimet made the community, Kajaran was increasingly reliant on the mine as the project matured, or there could be a causal tendency that local levels of crime and economic development due to mining were connected. There will be variations in how these causal influences work in the different cases, so that one might have strong indicators for a rise in crime while another might have weak indicators, where communities see no rise. Some causal tendencies will thus be dominant in some cases while in others they will be present but weak. Both will experience and be influenced by the same causal power, but the intensity will vary, and the respondents will make sense of these powers differently depending on how it affects their lives.

Thirdly, external causal powers are social and physical forces in the external environment which affect each case and the causal tendencies. These external causal powers can, for example, be in the form of legislation or other institutions, influential discourses, or the physical nature of the environment. Kajaran, for example, is a relative large community with some 7,100 citizens, where the majority, according to the local mayor, either work in the mine or are employed by subcontractors, while villages such as Teghut village in the northern part of the country, with around 700 residents, will be affected differently (Appendix 7.4). While there will be differences on the local level, it is presumed that, due to the shared context of Armenia (see section 1.1.4), external causal powers on a macro level will affect all cases equally or with small variations between them. The aim is that causal tendencies will emerge which can be isolated from what has been caused by legislation or other external forces, thereby enabling comparisons to be made on a case-by-case level between similar causal influences, retroducting what can be attributed to local variances and what are real underlying structures that can account for the strategies employed by mining MNEs that reduce community risk. Variations can be identified in the impact of these mechanisms that are unique to the particularities of the different cases, enabling the identification of how community risk events came into existence based on how

these risks affect the relationship between mining MNEs and communities of place. In the two examples, crime levels were attributed to the relatively long time the mine had operated and the rise in income was associated with the mine and not a result of a specific strategy from the company towards the community—e.g. a symptom of mining—while reliance on the mine was regarded as the result of a strategy to commit resources to the town of Kajaran that made the community of place dependent on the investments and good will of the mining MNE, Cronimet.

1.4.3.4 Critical assessment of methods and philosophy of science

Critical realism started as an attempt to bridge positivistic and constructionist stances by taking the best elements of both and combining them in one domain (Archer et al., 1998, p 16; Bhaskar, 1997; Sayer, 2000, p. 10). Making a distinction between the real, the actual and the empirical and focusing the analysis on generalising about mechanisms that describe the relationship between the three rather than about the specific populations, it is the ambition to analyse what distinguishes events and how these events are perceived. Most of the critique against critical realism has been confronted by the critical realists themselves, who argue that “[critical realism] provides a set of perspectives on society (and nature) and on how to understand them. It is not a substitute for, but rather helps guide, empirical controlled investigations into the structures generating social phenomena” (Bhaskar, 1989, p. 3). However, the central claim remains that social interactions can be reduced to the identification of a limited number of mechanisms that guide social behaviour. The critique here is that this approach reduces social phenomena to simple structures and generative mechanisms and this makes for a superficial analysis that might claim to be realist but in fact falls into the same pitfalls that it claims to avoid. By generalising not about populations (the case), but about mechanisms that determine social phenomena, the focus has just changed from the empirical generalisation found in the positivistic stance to generalisations about how social events come into being. Another claim against critical realism is that it seeks to explain all social phenomena—thus having a universal ontology where everything exists and nothing is irrelevant for inclusion in empirical analysis. As is also evident in this thesis, the researcher needs to make demarcations as to what to include and especially what not to include as a subject for analysis. The analysis of the impact of external causal power, as described above, becomes a format from where everything that might or might not be relevant can be included or excluded at will if it serves the purpose of explaining certain mechanisms.

Due to the context specificity of this theses it is hence not possible to know which mechanisms are context specific context in Armenia and the mining MNEs being investigated and which could be generalisable to the industry as a whole. This critique of the philosophy of science and the choice of a case study design is thus a limitation as to the degree that the contribution can be transferred to other cases outside Armenia.

1.5 Findings

The following section describes the findings of the five papers found in Chapters Two to Six. The first three chapters centre on the relationship between the MNEs and communities of place starting with the concept of risk. These chapters provide a conceptual perspective, using empirical examples from the research carried out in Armenia. The two final chapters focus on risk management as practised by the mining MNEs in Armenia, showing how these companies engage with the sensemaking process of community members and how this affects their risk exposure and participation in strengthening the local institutional environment.

The first paper investigates risk through history, from the functional perspective that we see in most risk management literature to a conceptualisation of risk as something that is perceived through a process of sensemaking. Since the introduction of risk management as a tool for organisations and businesses to reduce uncertainty in transactions, it has gone through four distinct transformations, from the functional perspective, focusing on cause and effect, to the cognitive perspective, exploring how risk decisions are made, taking into account that we, as individuals, never have full information or are truly rational. The sociocultural perspective investigates the distribution of risks throughout society and how blame and ultimately personal responsibility are assigned. Finally, the constructionist perspective focuses on the individual decision-maker, but takes into account how structures in society affect how people make sense of the dangers in their environment, also showing that people are producers of risk and uncertainty, which affects how their social environment reacts to change. Each of these conceptualises risk in a different way, as individuals and organisations over time have been faced with risk management challenges that they found difficult to understand and mitigate, evolving from information seeking and the management of unknowns to an increased interest in how individuals and decision-makers make sense of the information that is available to them. All four concepts are identified in risk management practices today and are present in how organisations deal with uncertainty. The increased volume of information, the availability of new tools for communication and increasing time constraints mean decision-makers are

progressively more reliant on their ability to make sense of the risks in their social and physical environment, and that all actors involved in risk management are increasingly reliant on fragments of information or cues and their subjective evaluation of the plausibility of such an event occurring as key indicators in their risk decision-making process. This shift in the conceptualisation of risk has implications for how researchers investigating decisions made by these organisations analyse mitigation and opportunity-seeking behaviour. The focus shifts from objectively identifiable risk mitigation as the main motivation of the risk decision-maker to mitigation of plausible adverse or opportunity-laden events.

The second paper focuses on the conceptual understanding of community risk and how communities are a source of risk. The paper differentiates between two types of community: communities of place, villages and towns that are situated in close proximity to the company's site of operations, and communities of interest, who are communities that have an interest in how a project unfolds, either because they are positive about the project or because they are critical. The paper argues, based on a sociological conceptualisation of risk as sensemaking, that communities of place do not react to changes in their environment in the same way as communities of interest. Communities of place, being directly affected by mining, will evaluate both the risks and the opportunities (jobs, investments, increased welfare, etc.) that come with the economic activity surrounding the project, while communities of interest, as part of their *raison d'être*, focus on either the negative (environmental impact, damage to cultural heritage or social changes) impacts that such activities bring with them or the positive impacts (job creation, investments, economic development) that are associated with investments in resources, arguing that communities, when faced with significant changes, as in the case of a mining project, will respond to these based on a sensemaking and framing process that is formulated based on community affiliation. This sensemaking process also entails that people create mental frames to guide their decision-making based on plausibility rather than on the accuracy of the information they receive. Community risk can thus be mitigated through intervention in the sensemaking process by creating cues, and argues for a certain plausibility that presents the most likely and satisfactory outcomes for the community of place. These frames of meaning do not necessarily need to be accurate, but they do need to be plausible for the community members, as illustrated by examples in the paper.

The third paper is an analysis of the Armenian mining industry from the perspective of the MNE, using risk management approaches described within the MNE literature. The paper shows how risk management is conceptualised into three distinct categories in this literature: financial,

political and cultural risk. Financial risks are linked to the management of economic uncertainties—for example, currency exchange risks, equity market fluctuations, commodity prices, and host and home country interest rates. Political risks come into existence when political actors interfere in ownership structures—for example, by threatening ownership structures or influences on the governance structure of the MNE. The third category of risk is cultural risk, which relates to the macro-issues impacting the company (both politically and economically) and the social and cultural aspects of uncertainty that could affect the business climate. As both endogenous and exogenous factors contribute to the overall country risk assessment, at least some element of these risks will be outside the control of the individual company. The paper further elaborates that an explanatory framework for conceptualising risk management practices using a sociological perspective on risk can be found in the relatively recent legitimacy-based view (LBV). The LBV is used to illustrate how mining MNEs entering Armenia build trust and make legitimacy claims towards communities of place and thereby reduce community risk. It furthermore shows how mining MNEs balance different legitimacy demands and engage in various forms of trade to gain legitimacy with the villages and towns that they are affecting.

The fourth paper is empirical and takes advantage of access granted to communities of place and mining MNEs in Armenia. The paper explores how MNEs in practice manage community risk and argues that community risk can be seen as a precursor to financial, political and cultural risks, showing how mining MNEs focus on mitigating community of place uncertainties in the initial phases of the project and later, when the social and environmental impact on the community is perceived to be highest, use fewer resources. The findings have implications for communities, government officials and civil society actors, as well as for mining MNE strategies. The findings show that communities of place are groomed through investments of MNE financial and organisational resources into villages and towns and can lead to the acceptance of these large-scale projects. But also, that communities of place can be seen as a homogeneous unit from a risk management perspective, despite members of the community having diverging opinions and disagreements about the project. The case studies illustrate how community members were not necessarily misled by the MNE into accepting a given mining project: in fact, they seemed very aware of the impact on the social and physical environment that these activities would have. Despite this knowledge, the community as a whole created meaning where they apparently were ready to trade short-term benefits in the way of jobs, improvements to infrastructure and so on for the adverse effects that might affect them in the

future. From a community risk management perspective, the community of place in this way can be treated as a homogeneous entity, although theories on community dynamics have shown that there can be significant disagreements among individuals and groups of community members. Furthermore it is found that mining MNEs, by focusing on communities of place, engage in a strategy which presents an obstacle for the critical communities of interest (NGOs) when it comes to educating and activating community of place members against the mining project. If the NGOs are to create uncertainty about a mining project, they require support from the community of place. By eliciting their support, it is possible for the community of interest to convince political actors, investors or cultural figures, who can pose a real risk to business continuity, to apply pressure on the mining MNE that can change their behaviour or lead them to give up their project entirely. However, if it is not possible to get this support, the community of interest has a weaker case and will have difficulty convincing these influential actors that the project goes against the interests of the community of place. The risk management strategies deployed result in the isolation of NGOs, as they lose legitimacy in the community of place and as government officials refute claims of illegal actions by the mining MNE. The community of place only becomes receptive to NGO grievance claims when the full social and physical impact of the mining activities becomes apparent, and by this time it is often too late to make significant changes to the project.

The fifth paper examines the institutional environment of Armenia by further exploring the role of legitimacy and its effect on mining MNE risk management. Institutions are important in risk management, as they reduce uncertainty about transactions that occur in society based on norms, rules and agreements that guide individual interaction. In Armenia, where formal institutions are considered weak due to corruption, strong political kinship networks and a weak economy, mining MNEs can encounter difficulties, because they lack knowledge (liability of foreignness), especially about informal institutions, or “The rules of the game,” in this opaque social environment. The paper investigates how MNEs can reduce the risks threatening business continuity by building or strengthening existing institutions. Three distinct types of institutions are studied, namely infrastructure, education and culture. The findings show that by subscribing to an MNE strategy that focuses on developing or strengthening local institutions, MNEs gain legitimacy with local communities (communities of place). Companies that made investments in close cooperation with the communities of place gained legitimacy following a localised strategy where local management had significant decision-making autonomy. The community became increasingly dependent on these economic and social investments and reliant on the

benefits that came from an improved institutional environment, which meant that they over time pose a smaller risk to business continuity. Alternative MNE risk management strategies focused on a more general institution-building approach, targeting a more diverse stakeholder audience, failed to produce similar results. MNE engagement in these kinds of activities not only had a direct operational impact, as in the case of infrastructure (access to roads, electricity, etc.) and education (qualified labour), but also served a purpose as part of a risk mitigation strategy regarding NGOs and other civil society actors. By gaining legitimacy from local communities, MNEs reduced the risk that communities would actively engage with outside and possibly influential stakeholders. Institution-building/strengthening thus served a dual purpose. First, it made the communities reliant on the MNE by providing much-needed services in the absence of, or at best a weak institutional environment. And, second, it served as a practical risk mitigation tool, which kept possibly critical NGOs and other civil society actors from partnering with local communities against the company and thereby presenting a potential hazard to its continued operations.

1.5.1 Cross-cutting summary and implications

This section is an account of the cross-cutting regularities that are presented in each chapter. The aim is to link the individual paper findings to the overall contribution of the PhD thesis by investigating possible mechanisms at work that transcend the papers. Cross-cutting regularities are a partial event which at first sight indicates the occasional but less than universal, the actualisation of a mechanism or tendency over a particular region or time-space (Archer et al., 1998, p. 149; Bhaskar, 1997). The patterns of observation are not in this sense generalisable outside the specific context being investigated in Armenia, but rather are evidence of causal impact given a set of mechanisms at work, which does not emerge until all the papers are compared. Figure 4 provides an overview of the mechanism that the thesis identifies related to the three central dimensions presented earlier—the mining MNE, communities and risk.

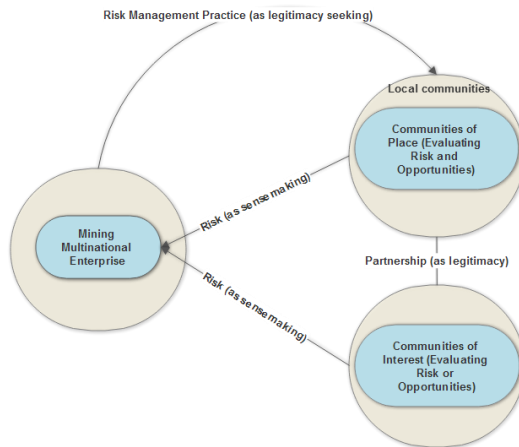


Figure 4. Mechanism affecting mining MNE-community relations

The cross-cutting findings centre on the mining MNE's relationship with communities of place and how this relationship is understood from a risk management perspective. Given that the thesis is limited to investigating the specific context of Armenia it is hence not possible to know which specific mechanisms are generalisable to the mining industry as a whole and the ones that only apply to the Armenian context. This limitation is an important factor when evaluating the thesis cross-cutting contribution and to what degree some of these can be transferred to alternate contexts. The columns in Table 4 show the mechanisms as they relate to the two central actors and are presented in each of the five paper chapters. The first mechanism that is conceptualised is risk as sensemaking, where cues and plausibility are determining factors in how we as individuals evaluate uncertainties in our social and physical environment, arguing that in an increasingly globalised world, it is meaning that individuals ascribe to information rather than accuracy (Chapters Two and Three). The second mechanism is centred on the differentiation between communities of place and communities of interest, as the two distinct groups have different ways of regarding the risks and opportunities that come from mining activities. Communities of place evaluate both risks and opportunities (such as the risk to health and the opportunity for an improved standard of living) when they make sense of a mining project; however, they have few resources available to them that could be utilised to influence

how the mining company behaves. In contrast, communities of interest regard mining as either a risk (critical NGOs) or an opportunity (mining interest organisations) and have the resources to potentially threaten the MNE's ability to operate (Chapters Three and Four). The community of place can, however, partner with communities of interest if they find that they have legitimate claims that they can support and thereby apply their combined resources to pose a risk to the mining MNE. Mining MNEs' management of community risk is in this respect regarded as a strategy that the mining MNE utilises in order to effectively manage the more complex financial, political and cultural risks. By committing resources to communities of place, the MNE reduces uncertainty that they will side with communities of interest who have the necessary resources to pose a threat to business continuity (Chapters Five and Six). This brings with it the final mechanism that has been identified, that MNEs can utilise legitimacy seeking as a risk management strategy by focusing efforts on building trust early in the mining project's evolution and before the community of place has formulated a clear opinion about the project or the mining MNE (Chapters Four and Six). Communities of place in this way engage in what can be characterised as a trade with the mining MNE, where short-term gains are traded for possible long-term pains in the exchange for legitimacy at a point where communities of interest pose a potential threat to the project.

Table 4. Cross-cutting contribution

The three dimensions and cross-cutting contribution			
Chp.	Mining MNE	Community	Risk
2	N/A	N/A	Conceptualisation of risk as sensemaking.
3	Contribution to the business literature, as community risk is identified	Communities of place as a unique source of risk	Contribution to the risk management literature is conceptualised through the communicative process of sensemaking
4	Community risk management, as a legitimacy seeking strategy	Knowledge of how communities of place influence MNE strategy	Presentation of risk as the loss of legitimacy

5	Showing how entry strategies are affected by community risk	Knowledge about community risks in Armenia	Risk from a communicative perspective and showing that gaps in perception is a source of risk
6	How MNEs actively influence their local social and physical environment in a region of weak institutions	Institution-building in local communities as a risk mitigation strategy	Building and strengthening institutions to reduce community risk and resource expenditure related to other types of risk

1.6 Contribution

This PhD thesis contributes to an in-depth understanding of the mechanisms behind how mining MNEs in Armenia manage community risk, and thereby contributes to the International Business and MNE risk management literature. This section describes the theoretical and empirical contributions of the thesis and presents a revision of the initial model in light of the new evidence and conclusions presented in the paper chapters.

The thesis combines two seemingly incompatible perspectives, namely the mainly positivistic stance seen in the international business risk management literature and a sociological perspective on risk and risk management. It argues that the creation of meaning has a significant effect on risk exposure and that the risk event is only one of the factors that contribute to the actions of the risk manager. This insight constitutes a new insight into the risk management literature that predominately regards the risk event and the cause–effect relationship that leads to its realisation as the centre of analysis. The ontological shift means that the nature of reality shifts from one where the view of the world, including its risks, is quantifiable and thereby manageable through direct action, to a perspective where the analysis focuses on the creation meaning and the realness of risk is the centre of analysis. The shift proposed is a change in what constitutes acceptable knowledge and how to study risk. Here the thesis argues that it is possible to find clues to how it is possible to answer this question from the critical realist perspective, that it is how we imagine things in the world, not the things in themselves, that constitute what makes sense, including how we handle the riskiness of living. By applying an epistemology that focuses on the meaning creation and what information that goes into this process, it is possible to understand the actions that managers take when faced with multiple choices of action. The contribution to the risk management literature is that in

seeking an alternative to the traditional focus on the risk event and identification of causes, it makes sense to analyse the mechanisms that have resulted in risk realisation or mitigation.

With the critical realism ontological and epistemological the thesis contributes further to the risk literature by arguing that a sociological approach to risk using sensemaking adds to our knowledge of how risks are identified and managed. The argument is that our traditional functional approach to understanding risk is inadequate and requires an individualised conceptualisation, where the focus is on how meaning is created rather than the actual event in isolation. Moreover, globalisation and access to new communication technologies have created a worldwide network between multiple stakeholders which is increasingly interconnected, providing risk managers with nearly unlimited access to the information they need to make decisions. It is therefore close to impossible to effectively manage all the relevant information about a given possible risk event using what is regarded as the traditional cause and effect approach to risk management. Rather, risk management is centred on identifying how managers of risk make sense of changes in their social and physical environment and how they take actions based on their interactions with this environment, past experiences, the cues they receive and their evaluation of what seem to them plausible risks. In this way, risk management decisions are based on how meaning is created rather on a purely objective assessment of all the information available to them, thereby making the focus of risk management the convergence of meaning rather than the identification and possible mitigation of objective truths based on clearly defined parameters. This does not mean that other ways of conceptualising risks described in the literature on risk have become obsolete, but that this new perspective based on sensemaking offers a perspective that explains certain risk behaviour, especially when uncertainties are associated with social interaction and non-technical risks where the nature of what constitute meaning can be debated.

Communities of place (CoFP) and their relations to Communities of Interest (CoFI) introduces a conceptualisation of communities that can be utilised in the MNE risk management literature. CoFP is groups of people who live together in the same physical environment and share the same economic, educational, religious and cultural institutions, but who have benefitted differently from these as the community has evolved. However, from the initial point of a given change, such as a mining project, risks are dispersed “democratically” across the community, in the sense that everyone will (at least initially) be exposed to the same degree of uncertainty, especially when it comes to a significant change originating from a mining project that will have environmental, social and economic consequences for the community.

Differences in risk exposure emerge as some community members will be able to take advantages of the opportunities that arise, while others are impacted negatively by the changes. CofP is in this way regarded as fragmented, in that individual community members will make sense of the changes in their environment differently and be in different positions to take advantage of the opportunities or mitigate threats arising from the mining project. Not that every community member will agree to the decisions made by the community as a whole, but that the outcome will foster a certain direction based on the member's distributed sensemaking, as described by Karl Weick. CofI can intervene in this process by presenting alternatives to the cues that the CofP identifies as part of their sensemaking and to the plausibility of future outcomes causing changes in the CofP's social and physical environment. The CofI have an interest in the sensemaking process of CofP, as they are a key component in the arguments either for or against the activities of the MNE and hence in the overall risk assessment.

A new dimension to the MNE risk management literature is presented, which focuses on uncertainties related to subnational levels of financial, political and cultural risk, namely community risks. The contemporary approach to risk management in the MNE literature is regarded as too simplistic when applied to communities of place; it fails to explain how localised risks come into existence and their effect on business continuity. The thesis hence contributes by showing how communities of place that have increasingly gained access to communication technologies and therefore in contact with a broad range of communities of interest outside the geographically confined space of their village or town. Community risks can, because of the improved outreach capabilities of communities of place, quickly evolve into national level, time-consuming and resource-intensive risks by eliciting responses from regional, national and global actors. The thesis shows that MNEs can position themselves in order to positively affect risk management resource expenditure by engaging with communities of place at an early stage of business development. Mining MNEs in Armenia apply resources to communities of place based on what is expressed in stakeholder engagement meetings, the knowledge of MNE managers and the operational requirements of the mining project. Communities of place have in turn improved their bargaining position by utilising their access to regional, national and global communities of interest to leverage their concerns about changes in their social and physical environment. Communities of interest have used support from the local population as a way to legitimise their own actions against the mining MNE and have applied financial, political and cultural pressure, thereby increasing MNE risk exposure.

Community risk, and risk in general, is associated with adverse events that organisations should try to avoid or mitigate if possible; however, there is also an element of opportunity that comes with identifying these risks if MNEs can address the issue of community of place legitimacy. The ability to efficiently mitigate these types of risk enables an MNE to venture into areas and regions where others, under normal circumstances, would struggle to cope, and would have to commit a disproportionate degree of their resources for mitigation. The context of Armenia, exemplified in this thesis, is just one of several such business environments where companies experience an institutional environment that is considered weak in the enforcement of its own rules. For some organisations, this can be seen as a blessing, but for the MNE it can be a significant challenge to balance the multiple local, national, regional and global institutional pressures. Investing in the institutions that support communities of place, it is possible to estimate with greater accuracy the resource requirements needed, knowing that this commitment will have a positive effect on macro-level financial, political and cultural risks. The mining MNE that has developed a community risk management practice will, given the nature of the institutional environment, have an efficiency advantage compared to similar MNEs that rely exclusively on financial, political or cultural macro-level mitigation strategies.

The thesis contributes by showing that there is a time dimension when it comes to how policymakers and local municipality representatives can explore their comparative advantage when a mining project is proposed. There are significant differences in MNE community risk approaches, depending on whether the mine is in the exploration or production stage. Mining projects in the exploration stage are primarily focused on being seen as trustworthy and on framing the evolving mining project as a positive change for the community of place. The aim of these efforts is to be able to build legitimacy in the community and thereby put the MNE in a better position to mitigate risks at a later stage, when the negative impacts are more salient. To achieve this aim, mining MNEs pursue strategies that are both communicative, in the form of information and knowledge, and physical, such as investments in the community itself. While it is well-known that there are long-term consequences of mining to the community of place in terms of social and environmental impacts, it is possible to offset some of them by exploring the short-term gains that the community is able to negotiate in the early stages of a mining project.

Finally, the thesis illustrates the importance of a strong and well-functioning critical civil society. While NGOs are under pressure and to some degree are marginalised in Armenian society, they do have the attention of the mining MNEs, as is shown in this thesis. If it had not been for the presence of these actors, some of the companies would be able to act with impunity or

very close to it, which undoubtedly would have meant that the negative impact on communities would have been even greater. While it is impossible to ascribe causality as to the effect of civil society actors and the behaviour of mining MNEs, their presence has significant importance when it comes to risk exposure.

1.7 Model for mining MNE community risk management

At the start of this chapter, a conceptual theoretical framework of community risk management was presented based on the MNE and risk management literature (Figure 3). This theoretical approach was then tested in the communities of place and mining MNEs operating in Armenia by investigating how community risk management was practised. The results of this work form the basis of a model which reflects the findings and contributions of the study on how mining MNEs manage community risk in the context of Armenia (Figure 5).

The first change which has been made to the theoretical framework is to move the centre of analysis from the risk event and the MNE, found in the literature, to the role of the risk management practices in risk mitigation and production. Through the concept of sensemaking, it is argued that decisions about the management of risk, when faced with an abundance of interrelated and partial information, are based on what makes sense rather than on the accuracy of the individual pieces of information available. Focusing on risk management practice and the process of sensemaking as a way to explain risk management decisions makes it possible to analyse change events beyond a fixed set of categories and the circumstances that lead to certain decisions. It is in this understanding not only the risk management system that guides decisions for the MNE, but also input from enactment, past experiences and other sources of information, including the need to make decisions that will protect the risk manager from criticism.

The second change comes from the realisation that the national level risk management categorisation into financial, political and cultural types of risk found in the literature includes a series of weaknesses that, when applied to communities of place, do not serve as a satisfactory explanatory framework for conceptualizing MNE community risk management. As reflected in the findings and contributions, risk management efforts are centred on building trust and being regarded as a legitimate actor by the community of place rather than managing individual uncertainties and risk events in the social and physical environment. Subsequently, the model is changed to reflect how mining MNEs manage community risk by building relationships with the community of place through three types of trust building activity, one or more of which can be present at any given site. First, mining MNEs localise their strategic decisions in close

cooperation with members of the community by giving subsidiaries the autonomy to take action regarding the relationship. Second, they build capacity in the villages and towns by providing procurement opportunities and access to cheap finance and, as community of place members; they gradually enter specialist and supervisory roles. Third, the mining MNEs invest resources into the institutional environment, focusing on three areas: infrastructure, education and cultural/social facilities. Community risk management is thus primarily focused on how members of the community of place perceive changes in their environment rather than the possible adverse events that could materialise, which is the aim of community risk mitigation efforts. The three trust building strategies are thus made up of five variables within which MNE risk managers make decisions: localisation, capacity, infrastructure, education and social/cultural related risk mitigation efforts.

The third change to the theoretical model is that the conceptualisation of communities is updated so that it reflects the observations made of MNEs' risk management behaviour. The findings illustrate that the mining MNEs in Armenia direct their community risk management efforts towards communities of place rather than communities of interest, despite the latter having more resources available to them and therefore the potential to threaten business continuity. It was found that when communities of place regarded MNEs as legitimate, communities of interest were to a large extent marginalised and had little or no opportunity to affect the way events evolved in the villages and towns affected by mining. While these critical communities of interest had other avenues through which they could apply pressure to the MNE, they lacked the legitimacy that comes with the support of the community of place. It is thus argued that communities of interest have greater leverage to apply pressure on the mining MNE, due to their access to resources, if they have the support and thereby the legitimacy of communities of place, as this can substantiate the justification for action against or in support of the mining MNE. By focusing the mining MNE's risk management resources on the community of place, it is possible to marginalise other community groups and position the mining MNE as a legitimate actor. While the mining MNEs still manage communities of interest by providing information and engaging in different forms of dialogue, it is evident that resources are committed to community risk management targeting communities of place. However, if the mining MNE is unable to gain trust and thereby legitimacy, it is possible for the community of interest to gain legitimacy and thereby use its resources more efficiently to subject the mining MNE to risk.

The model also reflects how communities manage their relationship with the mining MNEs and not only how mining MNEs manage communities. Communities of place are well aware that there are both positive and adverse effects of mining in their social and physical environment, in contrast to the communities of interest, who distinctly focus their efforts on either the positive or the negative consequences of mining activities, such as when lobbying organisations argue for the economic impact that mining will have on the community or NGOs highlight environmental concerns. Communities of place are not oblivious to the consequences of having mining activities near their village or town, knowing that mining brings opportunities for employment and investment and that the community will be able to sell its agricultural and other products, but they are also aware that there will be long-term effects that can result in social tensions between community members, changes to the land and endangerment of health. By being conscious of these consequences, the communities of place are engaging in a trade with the mining MNE, where they try to bargain some of the long-term implications for some immediate benefits. The trade-off is in the form of securing jobs for community members in the construction and later the production phases of the mine and direct investments in the local institutional environment, such as access to education, cultural heritage sites and roads. In exchange for these benefits, the community trades the possible negative consequences that it might endure in the long term. The reduced risk exposure prompts mining MNEs to scale down their community engagement activities as the project enters production and the perceived community risk justifies a disinvestment in the community of place.

The model provides an improved detailed depiction of how mining MNEs in Armenia are managing community risk. The process starts with the mining MNE, which allocates resources to a number of, or all five, trust building variables; this in turn provides the MNE with legitimacy from the community of place. As a consequence of these investments, the legitimacy of communities of interest is reduced: the community of place builds trust with the MNE, trading the immediate benefits of the MNE's resource allocation for long-term consequences. The legitimacy of the community of interest's claims to represent the community of place is thus reduced. The cycle of resource allocation and trust building can then continue to the point where the mining MNE deems the community risks to be acceptable and continued resource commitment can be reduced. However, if the mining MNE is unable to engage in this virtue cycle, it allows the community of interest to gain legitimacy from the community of place and hence the ability to utilise its resources to apply pressure to the MNE in the form of increasing one or all of the financial, political or cultural risks.

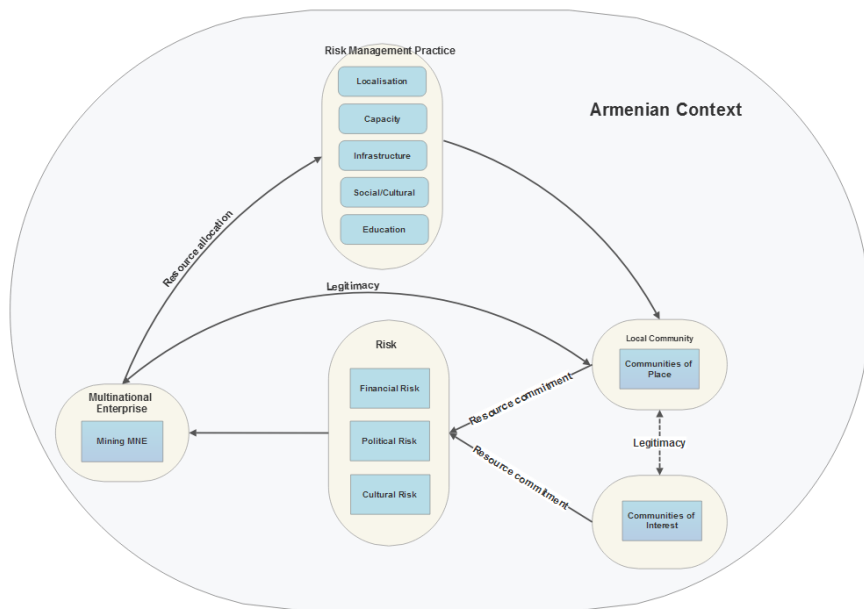


Figure 5. Mining MNE community risk management

1.8 Conclusion

This PhD thesis has sought to answer the question of how mining MNEs manage community risk in Armenia, finding that mining MNEs in Armenia manage community risk by engaging in the sensemaking process with members of communities of place through the allocation of resources (localisation, capacity, infrastructure, social/cultural and education) that ensures that the community members regard the MNE as legitimate and trustworthy. Communities of place are important to the MNE despite a lack of resources that would enable them to jeopardise business continuity, because they act as an effective gatekeeper when critical communities of interest mobilise macro level financial, political and cultural risks. This does not mean that communities of interest do not pose a potential threat to business continuity, but rather that the legitimacy of their claims comes to lack an important component, namely the support of the people who are the most affected by mining activities.

1.9 References

- Aghalaryan, K., & Baghadasaryan, E.(2014). *Teghout's offshore labyrinth and Valeri Mejlumyan's business empire*. Retrieved from: <http://hetq.am/eng/news/54322/teghouts-offshore-labyrinth-and-valeri-mejlumyans-business-empire.html>
- Anderson, C.(2014). Mining and the fall and rise of poverty in southern West Virginia. *The Extractives Industry and Society*, 1:2–3.
- Angrosino, M.(2011). Focus on observation. In: *Doing ethnographic and observational research editor Angrosino, M.* (page 53-66). Thousand Oaks:SAGE Publications.
- Amour, P.O.(2012), Practical, theoretical and methodological challenges of field research in the Middle East, *Historical methods*, 45(3):143-149
- Archer, M.(2010). Routine, reflexivity, and realism. *Sociological Theory*, 28(3):272–303.
- Archer, M., Bhaskar, R., Collier, A., Lawson, T., & Norrie, A.(1998). *Critical realism: Essential readings*. Centre for Critical Realism, London: Routledge.
- Armenian Mining Network.(2016). Interview with Nara Arzumanyan. Retrieved from: <http://www.armenianminingnetwork.com/>
- Armstat Economic Activity.(2014). *Statistical yearbook of Armenia*. Retrieved from: <http://www.armstat.am/en/?nid=45.&year=2014>
- Armstat Income of Population.(2014). *Statistical yearbook of Armenia*. Retrieved from: <http://www.armstat.am/en/?nid=45&year=2014>
- Atkinson, R., & Flint, J.(2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social Research Update*, 33(1):1-4.
- Auty, R.M.(1994). Industrial policy reform in six large newly industrializing countries: The resource curse thesis. *World Development*, 22(1):11–26.
- Aven, T.(2016). Risk assessment and risk management: Review of recent advances on their foundation. *European Journal of Operational Research*, 253:1–13.
- Bammer, G., & Smithson, M.(2008). *Risk and uncertainty: Multidisciplinary perspectives*. London: Earthscan.
- Ballard, C., & Banks, G.(2003). The anthropology of mining. *Annual Review of Anthropology*, 32, 287–313.
- Beauchemin, C.(2011). Sampling international migrants with origin-based snowballing method: New evidence on biases and limitations. *Demographic Research*, 25(3):103–134.
- Bebbington, A., Hinojosa, L., Bebbington, D.H., Burneo, M.L., & Warnars, X.(2008). Contention and ambiguity: Mining and the possibilities of development. *Development and*

Change, 39(6):887–914.

- Beck, U.(1992). *Risk society: Towards a new modernity*. London: Sage.
- Beck, U.(2009). Critical theory of world risk society: A cosmopolitan vision. *Constellations*, 16(1), 3–22.
- Beck, U., & Beck-Gernsheim, E.(2002). Losing the traditional: Individualization and precarious freedoms. In: *Individualization: Institutionalized individualism and its social and political consequences edited by Beck, U., & Beck-Gernsheim, E.* (page 42-54). London: Sage.
- Bhaskar, R.(1989). *Reclaiming reality: A critical introduction to contemporary philosophy*. London: Verso.
- Bhaskar, R.(1997). On the ontological status of ideas. *Journal for the Theory of Social Behaviour*, 27(2/3):139–147.
- Bhaskar, R.(2008). *A realist theory of science*. London: Routledge.
- Bisman, J.(2010). Postpositivism and Accounting Research : A (Personal) Primer on Critical Realism, *Australasian Accounting Business & Finance Journal*, 4(4):3-25
- Bond, A.R., & Levine, R.M.(1997). Development of the copper and molybdenum industries and the Armenian economy. *Post-Soviet Geography and Economics*, 38(2):105–120.
- Brennan, M., Birdger, J., & Theodorelter.(2013). *Contemporary theories of community and development*. London: Routledge.
- Dubois, A. & Gadde, L-E.(2012) Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55:553-560
- Bush, K., & Duggan, C.(2013). Evaluation in conflict zones: Methodological and ethical challenges. *Journal of Peacebuilding & Development*, 8(2):5–25.
- Business for Social Responsibility (BSR).(2003). *The social license to operate*. Retrieved from: http://www.sds.org/wp-content/uploads/2013/04/file_BSR_Social_License_to_Operate.pdf
- Business for Social Responsibility (BSR).(2011). *Commercial value from sustainable local benefits in the extractives industries: local content*. Retrieved from: https://www.bsr.org/reports/BSR_LocalContent_March2011.pdf
- Butler, K. C., & Joaquin, D. C.(1998). A note on political risk and the required return on foreign direct investment. *Journal of International Business Studies*, 29(3):599–607.
- Calvano, L.(2008). Multinational corporations and local communities: A critical analysis of conflict. *Journal of Business Ethics*, 82:793–805.

- Campbell, J.T., Eden, L., & Miller, S.R.(2011). Multinationals and corporate social responsibility in host countries: Does distance matter? *Journal of International Business Studies*, 43:84–106.
- Campbell, J. L., & Hall, J.A.(2009). National identity and the political economy of small states. *Review of International Political Economy*, 16(4):547–572.
- Cheshire, L.(2010). A corporate responsibility? The constitution of fly-in, fly-out mining companies as governance partners in remote, mine-affected localities. *Journal of Rural Studies*, 26:12–20.
- Chobanyan, A., & Leigh, L.(2006). The competitive advantages of nations: Applying the ‘Diamond’ model to Armenia. *International Journal of Emerging Markets*, 1(2):147–164.
- Civilnet. (2015). *The Civilitas Foundation*. Retrieved from: <http://civilnet.am/>
- Clark, E., & Marois, B.(1996). *Managing risk in international business: Techniques and applications*. Ontario:Thomson Business Press.
- Clarkson, M.B.E.(1995). A stakeholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review*, 20(1):92–117.
- Cohen, N., & Arieli, T.(2011). Field research in conflict environments: Methodological challenges and snowball sampling. *Journal of Peace Research*, 48(4):423–435.
- Crow, G. & Alan, G.(1994). *Community life - an introduction to social relations*. London:Routledge.
- Davis, R., & Franks, D.M.(2011). The costs of conflict with local communities in the extractive industry. *Seminar on Responsible Mining 2011, Chapter 6*:1–13.
- Davis, R., & Franks, D.M.(2014). Costs of company-community conflict in the extractive sector. *Corporate Social Responsibility Initiative Report No. 66*. Cambridge, MA: Harvard Kennedy School.
- De Wall, T. (2003). *Black Garden: Armenia and Azerbaijan through peace and war*. New York, NY:New York University Press.
- De Waal, T.(2010). *The Caucasus: An introduction*. New York, NY: Oxford University Press.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. *American Sociological Review*, 48(2), 147–160.
- Dixit, M.(2012). Field research in conflict zones: Experience from India and Sierra Leone. *International Studies*, 49(1&2):133–150.
- Donaldson, T., & Preston, L.E.(1995). The stakeholder theory of the corporation: Concepts,

- evidence, and implications. *The Academy of Management Review*, 20(1):65–91.
- Dunham, L., Freeman, R.E., & Liedtka, J.(2006). Enhancing stakeholder practice: A particularized exploration of community. *Business Ethics Quarterly*, 16(1):23–42.
- Dunning, J.H.(1981). *International production and the multinational enterprise*. London:Routledge.
- Dunning, J.H.(2001). The eclectic (OLI) paradigm of international production: past, present and future. *International Journal of the Economics of Business*, 8(2):173–190.
- Dunwoody, S., & Griffin, R.J.(2015). Risk information seeking and processing model. In: *The SAGE handbook of risk communication*. (page 102-116). Thousand Oaks:Sage.
- Ecolur.(2015). *Interview with Inga Zarafyan*. <http://www.ecolur.org/>
- Economist.(2015a). *Fancy footwork: How businesses linked to blacklisted oligarchs avoid Western sanctions*. Retrieved from: <http://www.economist.com/news/business/21643122-how-businesses-linked-blacklisted-oligarchs-avoid-western-sanctions-fancy-footwork>
- Economist.(2015b). *Country report: Armenia*. London: Economist Intelligence Unit.
- Edwards, P.,O’Mahoney, J., & Vincent, S.(2014). *Studying organisations using critical realism*, Oxford: Oxford University Press.
- Eisenhardt, K.M.(1989). Building theories from case study research. *The Academy of Management Review*, 14(4):532–550.
- Elder-Vass, D.(2010). *The causal power of social structures*. Cambridge:Cambridge university press, UK.
- European Bank for Reconstruction and Development (EBRD).(2016). *Lydian (Amulsar gold mine)*.
- Extractives Industries Transparency Initiative (EITI).(2015). EITI International Secretariat, issued 1 January 2015, Oslo, Norway.
- Figueira-de-Lemos, F., Johanson, J., & Vahlne, J.(2011). Risk management in the internationalisation process of the firm: A note on the Uppsala model. *Journal of World Business*, 46(2):143–153.
- Fletcher, A. J.(2016). Applying critical realism in qualitative research: Methodology meets method. *International Journal of Social Research Methodology*, 1–14.
- Flick, U.(2009). *An introduction to qualitative methods*. (4th edition). London: Sage Publications.
- Flyberg, B.(2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12(2):219-245
- Fortune Oil.(2016). Corporate website, retrieved from: <http://www.fortune->

oil.com/en_us/index.htm

- Foss, N.J. & Pedersen, T. (2004) Organizing Knowledge Processes in the Multinational Corporation: An Introduction, *Journal of International Business Studies*, 35(5):340-349
- Franks, D.M., & Cohen, T.(2012). Social license in design: Constructive technology assessment within research and development institution, *Technological Forecasting & Social Change*, 79:1229–1240.
- Franks, D.M., Davis, R., Bebbington, A.J., Ali, S.H., Kemp, D., & Scurrah, M.(2014). Conflict translate environmental and social risk into business costs. *PNAS*, 111(21):7576–7581.
- Freeman, E.R.(1984). *Strategic management: A stakeholder approach*. Boston, MA: Pitman.
- Gammeltoft, P., Barnard, H. & Madhok, A.(2010). Emerging multinationals, emerging theory: Macro- and micro-level perspectives. *Journal of International Management*, 16:95-101.
- Gavras, P., Vogiaz, S.D., & Koura, M.(2016). An empirical assessment of sovereign country risk in the Black Sea region. *International Advances in Economic Research*, 22:77–93.
- Geertz, C.(1973). *The interpretation of cultures: Selected essay*. New York, NY: Basic Books.
- Gel'man, V., & Marganiya, O.(2010). *Resource curse and post-Soviet Eurasia: Oil, gas and modernization*. London:Lexington Books.
- GeoProMining (GPM).(2016). Corporate website Armenia, retrieved from: <http://www.geopromining.com/en/our-business/operations/agarak/> (Accessed 01/05/2015)
- Gephart, R.P., Van Maanen, J., & Oberlechner, T. (2009). Organizations and risk in late modernity. *Organisation Studies*, 30(02/03):141–155.
- Ghoshal, S.(1987). Global strategy: An organizing framework. *Strategic Management Journal*, 8:425–440.
- Giddens, A.(1990). *The consequences of modernity*. Cambridge, UK: Polity.
- Gifford, B., & Kestler, A.(2008). Towards a theory of local legitimacy by MNEs in developing nations: Newmont mining and health sustainable development in Peru. *Journal of International Management*, 14:340–352.
- Global Compact (UN GC).(2016). *Global Opportunity Report 2016*. Retrieved from: <https://www.unglobalcompact.org/library/1171>
- Global Gold.(2016). Corporate website, retrieved from: <http://www.globalgoldcorp.com/>
- Global Reporting Initiative (GRI).(2006). *Sustainability reporting guidelines*. Amsterdam: Global Reporting Initiative.
- Godoy, R.(1985). Mining: Anthropological perspectives. *Annual Review of Anthropology*, 14:199–217.

- Graetz, G., & Franks, D.M.(2015). Conceptualising social risk and business risk associated with private sector development projects. *Journal of Risk Research*, 19(5):581–607.
- Greenpeace.(2017). *Greenpeace international*. Retrieved from: <http://www.greenpeace.org/international/en/>
- Guba, E.G., & Lincoln, Y.S.(1994). Competing paradigms in qualitative research. In: N. K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (Page 105-117). Thousand Oaks, CA: Sage.
- Haer, R., & Becher, I.(2012). A methodological note on quantitative field research in conflict zones: Get your hands dirty. *International Journal of Social Research Methodology*, 15(1):1–13.
- Haggi, M., & Sivakumar, K.(2009). Managing diverse risks: An integrated framework. *Journal of International Management*, 15:286-295
- Hampton, J.J.(2009). *Fundamentals of enterprise risk management: How top companies assess risk, manage exposure, and seize opportunity*. Los Angeles: Amacon.
- Hansson, S.O.(2012). A panorama of the philosophy of risk. In: Roser, R., Hillerbrand, R., Sandin, P., & Peterson, M. (Eds.), *Handbook of risk theory. Vol.1.* (page 27-54). London:Springer.
- Harvey, B.(2014). Social development will not deliver social license to operate for the extractives industry. *The Extractives Industry and Society*, 1:7–11.
- Healy, M., & Perry, C.(2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal*, 3(3):118–126.
- Henisz, W.J., & Zelner, B.A.(2010). The hidden risks in emerging markets. *Harvard Business Review*, April:88–96.
- Hergnyan, S.(2015), *Zangezur Copper Molybdenum Combine Largest Mining Taxpayer - \$839 Million*, Retrieved from [http://hetq.am/eng/news/60143/zangezur-copper-molybdenum-combine-largest-mining-taxpayer---\\$839-million.html](http://hetq.am/eng/news/60143/zangezur-copper-molybdenum-combine-largest-mining-taxpayer---$839-million.html)
- Hillman, A.J., & Keim, G.D.(2001). Shareholder value, stakeholder management, and social issues: What’s the bottom line? *Strategic Management Journal*, 22:125–139.
- Hilson, G., & McQuilken, J.(2014). Four decades of support for artisanal and small-scale mining in sub-Saharan Africa: A critical review. *The Extractives Industry and Society*, 1:104–118.

- Holterman, D.(2014) The biopolitical war for life: Extractivism and the Ugandan oil state. *The Extractives Industry and Society*, 1:28–37.
- Honey, G.(2009). *A short guide to reputation risk*. Farnham:Gower.
- Horowitz, L.S.(2010). ‘Twenty years is yesterday’: Science, multinational mining, and the political ecology of trust in New Caledonia. *Geoforum*, 41:617–626.
- Hoskin, A.J.(1912). *The business of mining: A brief, non-technical exposition of the principles involved in the profitability of mines*. Unknown: J.B. Lippincott.
- World Bank.(2016). World Bank Assessment of Armenian Mining Sector Indicates Opportunities for Growth. Press release 8 June 2016 <http://www.worldbank.org/en/news/press-release/2016/06/07/world-bank-assessment-of-armenian-mining-sector-indicates-opportunities-for-growth> (Retrieved 14/11/2017)
- Husted, B.W., & Allen, D.B.(2006). Corporate social responsibility in the multinational enterprise: Strategic and institutional. *Journal of International Business Studies*, 37(6):838–849.
- Hoti, S., & McAleer, M.(2004). An empirical assessment of country risk ratings and associated models. *Journal of Economic Surveys*, 18(4):539–588.
- Hymer, S.H.(1976). *The interactional operations of national firms: A study of direct investment*. Cambridge, MA: MIT Press.
- International Council of Mining and Metals (ICMM).(2013). *Changing the game-communication and sustainability*. London:ICMM
- International Council of Mining and Metals (ICMM).(2015). *Indigenous people and mining*. (2nd edition). London:ICMM
- International Council of Mining and Metals (ICMM).(2015a). *Understanding Company-Community Relations Toolkit*, London:ICMM
- International Council of Mining and Metals (ICMM).(2015b). *research on company-community conflict*, London:ICMM
- International Council of Mining and Metals (ICMM).(2016). International council on mining and metals, Twitter. Retrieved from: <https://twitter.com/search?q=ICMM&src=typd> (Retrieved 05/10/2016)
- International Council of Mining and Metals (ICMM).(2016a). Role of mining in national economies. www.icmm.com/romine/index (Retrieved 14/11/2017)
- International Finance Corporation (IFC).(2012). *IFC performance standards on environmental and social sustainability*. Washington DC: World Bank Group.

- International Finance Corporation (IFC).(2013). *Armenia Country profile report*. Washington DC: World Bank Group
- International Finance Corporation (IFC).(2015). *The EITI standard*. Washington DC: World Bank Group.
- International Monetary Fund (IMF).(2014). *Republic of Armenia: Special report*. Issued March 2015. Paris:IMF
- International Monetary Fund (IMF).(2016). *Republic of Armenia: Special report*. Issued June 2016. Paris:IMF
- International Organisation for Standardisation (ISO) 14000.(2009). *Environmental management*. Geneva, Switzerland: ISO Central Secretariat.
- International Organisation for Standardisation (ISO) 26000.(2012). *Guidance on social responsibility*. Geneva, Switzerland: ISO Central Secretariat.
- Investment Guide.(2013). *Investment guide: Armenia 2013*. Yerevan: The Ministry of Economy of the Republic of Armenia.
- Ishkanian, A.(2013). *Civil society, development and environmental activism in Armenia*. Department of social policy. London School of Economics.
- Johanson, J., & Vahlne, J.E.(1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1):23–32.
- Johanson, J., & Vahlne, J.E.(2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40:1411–1431.
- Jorion, P.(1996). *Value at risk*. New York, NY: McGraw-Hill.
- Kambeck, M., & Ghazaryan, S. (Eds.)(2013). *Europe's next avoidable war: Nagorno-Karabakh*. London:Palgrave Macmillan.
- Kemp, D., & Owen, J.R.(2013). Community relations and mining: Core to business but not 'core business'. *Resource Policy*, 38:523–531.
- Kemp, D., Owen, J.R., & van de Graff, S.(2012). Corporate social responsibility, mining and 'audit culture'. *Journal of Cleaner Production*, 24:1–10.
- Kemp, D., Worden, S., & Owen, J.R.(2016). Differentiated social risk: Rebound dynamics and sustainability performance in mining. *Resource Policy*, 50:19–26.
- Khanna, T., & Palepu, K.(1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, July–August:41–51.

- Kostova, T., & Zaheer, S.(1999). Organisational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1):64–81.
- Kot, S., & Dragon, P.(2015). Business risk management in international corporations. *Procedia Economics and Finance*, 27:102–10.
- Kraemer, R., & van Tulder, R.(2009). Internationalization of TNCs from the extractive industries: A literature review. *Transnational Corporations*, 18(1), 137–156.
- Kristensen, P.H., & Morgan, G.(2013). Theoretical contexts and conceptual frames for the study of 21st century capitalisms. In: Morgan G. & Whitley (Eds.), *21st century capitalism*. Oxford, UK: Oxford University Press.
- Kwok, C.C., & Reeb, D.M.(2000). Internationalisation and firm risk: An upstream-downstream hypothesis. *Journal of International Business Studies*, 31(4):611–629.
- Kytle, B., & Ruggie, J. G.(2005). Corporate social responsibility as risk management: A model for multinationals. *Corporate social responsibility initiative working paper No. 10*, Cambridge, MA: John F. Kennedy School of Government, Harvard University.
- Labonne, B.(1999). The mining industry and the community: Joining forces for sustainable social development. *Natural Resource Forum*, 23:315–322.
- Lamin, A., & Livanis, G.(2013). Agglomeration, catch-up and the liability of foreignness in emerging economies. *Journal of International Business*, 44:576–606.
- Lessard, D., & Lucea, R.(2009). Embracing risk as a core competence: The case of CEMEX. *Journal of International Management*, 15:296–305.
- Lodh, S., & Nandy, M.(2008). Exploring country risk: MNCs mindset. *The ICFAI Journal of International Business*, 3(2):24–35.
- López-Durate, D., & Vidal-Suárez, M.M.(2010). External uncertainty and entry mode choice: Cultural distance, political risk and language diversity. *International Business Review*, 19:575–588.
- Lou, Y.(2009). Political risk and country risk in international business: Concepts and measures. In: *Oxford handbook of international business edited by Rugman, A.M.* (2nd edition). (page 741-760) Oxford: Oxford University Press.
- Lupton, D.(2013). Risk and emotion: Towards an alternative theoretical perspective. *Health, Risk & Society*, 15(8):634–647.
- Lydian International.(2014). *Amoulsar gold project: Updated feasibility study*. Investor presentation, September 2014.

- Lydian International.(2016). Lydian international corporate website, retrieved from: <http://www.lydianinternational.co.uk/>
- Lynch, M.(2002). *Mining in world history*. London: Reaction Books.
- Mabry, L.(2012). Case study in social research. In: *The SAGE handbook of social research methods editors Alasuutari, P., Bickman, L., & Brannen J.* (page 214–227). London:Sage.
- McDonnell, E.(2015). The co-constitution of neoliberalism, extractive industries, and indigeneity: Anti-mining protests in Puno, Peru. *The Extractive Industry and Society*, 2:112-123
- Magill, K.(1994). Against critical realism. *Capital & Class*, 54:113–136.
- Margaryan, A., & Gabuzyan, A. (2014). Armenia. In: Junger-Tas, J., Marshall Dirk, I.H., Enzmann, D., Killias, M., Steketee, M., & Gruszczynska, B. (Eds.), *Juvenile delinquency in Europe and beyond* (Chapter 26, pp. 369–382). London:Springer
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W.(2009). Institutions, resources and entry strategies in emerging economies. *Strategic Management Journal*, 30(1):61-80.
- McKinnon, R.(2010). Social risk management and the World Bank: Resetting the ‘standards’ for social security? *Journal of Risk Management*, 7(3):297–314.
- McMahon, G., & Moreira, S.(2014). The contribution of the mining sector to socioeconomic and human development. *World Bank, Oil, Gas, and Mining Unit Working Paper*, 30.
- Mikes, A.(2011). From counting risk to making risk count: Boundary-work in risk management. *Accounting, Organisations and Society*, 36:226–245.
- Miller, K.D.(1992). A framework for integrated risk management in international business. *Journal of International Business Studies*, 23(2):311–331.
- Mining Code.(2011). *Mining code of the Republic of Armenia*. Passed November 2011.
- Mining.com.(2016). Global mining news source, retrieved from: <https://twitter.com/mining>
- Mining Journal.(2011). Armenia mining journal. In: *Mining Journal*. London: Aspermont.
- Mining Watch.(2016). *Mining Watch project*. Retrieved from: https://twitter.com/Mining_Watch
- Monjezi, M., Shahriar, K. & Dehghani, H. (2009). Environmental impact assessment of open pit mining in Iran, *Environmental Geology*, 58(1):205-2016
- Morris, M., Kaplinsky, R., & Kaplan, D.(2012). *One thing leads to another: Promoting industrialisation by making the most of the commodity boom in Sub-Saharan Africa*. Cape Town:Self-published

- Mudambi, R.(2008). Location, control and innovation in knowledge-intensive industries. *Journal of Economic Geography*, 8:699-725
- Mutti, D., Yakovleva, N., Vazquez-Brust, D., & Di Marco, M.H.(2012). Corporate social responsibility in the mining industry: Perspectives from stakeholder groups in Argentina. *Resource Policy*, 37:212–222.
- NVIVO.(2017). About Nvivo software, found at <http://www.qsrinternational.com/nvivo/what-is-nvivo> (Accessed 03/11/2017)
- Nyame, F.K., & Grant, A.(2014). The political economy of transitory mining in Ghana: Understanding the trajectories, triumphs, and tribulations of artisanal and small-scale operators. *The Extractives Industry and Society*, 1:75–85.
- Obeng-Odoom, F.(2014). Oil, sex, and temporary migration: The case of Vienna City, Sekondi-Takoradi, Ghana, *The Extractives Industry and Society*, 1:69–74.
- OECD.(2008). *Guidance on evaluating conflict prevention and peacebuilding activities*. Paris: OECD.
- Orbis.(2016). Company information across the globe. Retrieved from: www.orbis.bvdinfo.com
- Oxford Dictionary.(2016). *The Oxford English corpus*. Retrieved from: <https://www.sketchengine.co.uk/oxford-english-corpus/>
- Pan-Armenian.(2015). Pan-Armenian YouTube channel, retrieved from: <https://www.youtube.com/user/armecofront>
- Paremuzyan, L.(2012). *Teghout mine security beat up local villagers: Residents block road in protest*. Retrieved from: <http://hetq.am/eng/news/13158/teghout-mine-security-beat-up-local-villagers-resident-block-road-in-protest.html>
- Park, B.I., Chidlow, A., & Choi, J.(2014). Corporate social responsibility: Stakeholder influence on MNE activities. *International Business Review*, 23(5):966–980.
- Peng, M., & Meyer, K.(2011). *International business*. London: Cengage Learning EMEA.
- Petrosyan, V., Orlova, A., Dunlap, C.E., Babayan, E., Farfel, M., & von Braun, M.(2004). Lead in residential soil and dust in a mining and smelting district in northern Armenia: A pilot study. *Environmental Research*, 94(3):297–308.
- Poulis, K., Poulis, E., & Plakoyiannaki, E.(2013). The role of context in case study selection: An international business perspective. *International Business Review*, 22:304–314.
- Power, M.(2004). Counting, control and calculation: Reflections on measuring and management. *Human Relations*, 57(6):765–783.
- Prno, J., & Slocombe, D.S.(2014). A systems-based conceptual framework for assessing the

- determinants of a social license to operate in the mining industry. *Environmental Management*, 53:672–689.
- Raufflet, E., Cruz, L., & Bres, L.(2014). An assessment of corporate social responsibility practices in the mining and oil and gas industries. *Journal of Cleaner Production*, 30:1–15.
- Sagebien, J., & Lindsay, N.M.(2011). *Governance ecosystems: CSR in the Latin American mining sector*. London: Palgrave Macmillan.
- Save Teghut.(2014). *10 reasons why Amulsar should not be strip-mined*, The Save Teghut Civic Initiative. Retrieved from: <http://teghut.am/wp-content/uploads/2014/11/10ReasonsWhyAmoulsarShouldNotBeStrip-Mined.pdf>
- Sayer, A.(1992). *Method in social science: A realist approach*. London:Routledge.
- Sayer, A.(2000). Key features of critical realism in practice: A brief outline. In: *Realism and social science editor Sayer A. (page 10-28)* London: Sage.
- Schwartz, M.S., & Carroll, A.B.(2003). Corporate social responsibility: A three-domain approach. *Business Ethics Quarterly*, 13(4):503–530.
- Shaffer, B.(2009). The geopolitics of the Caucasus. *Brown Journal of World Affairs*, 15(2):131–142.
- Shenkar, O.(2001). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 32(3):519–535.
- Simon, J.D.(1984). A theoretical perspective on political risk. *Journal of International Business Studies*, 15(3):123–143.
- Steele, G. R. (2005). Critical thoughts about critical realism. *Critical Review*, 17(1):133–154.
- Stevens, C.E., Xie, E., & Peng, M.E.(2016). Towards a legitimacy-based view of political risk: The case of Google and Yahoo in China. *Strategic Management Journal*, 37:945–963.
- Suchman, M.C.(1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3):571–610.
- Teghut.(2016). *Save Teghut*. Retrieved from: <http://teghut.am/en/>
- Teghut Interview.(2015). ‘*Save Teghut*’ initiative: Interview with Anna Shahnazaryan. Retrieved from: <http://teghut.am/en/>
- The Armenian Weekly.(2012). ‘*Save Teghut*’ redefines environmental activism in Armenia. Retrieved from: <http://armenianweekly.com/2012/02/21/save-teghut-redefines-environmental-activism-in-armenia/>

- The Armenian Weekly.(2014). *Armenia joins Eurasian Economic Union despite hurdles, objections*. Retrieved from: <http://armenianweekly.com/2014/10/13/armenia-joins-eurasian-economic-union-despite-hurdles-objections/> (12/05/2016)
- Thomson, I., & Boutilier, R.G.(2011). The social licence to operate. In: Darling, P. (Ed.), *SME mining engineering handbook*. Littleton, CO: Society for Mining, Metallurgy and Exploration.
- Transparency International.(2011). Risks and Opportunities for the NGO sector in Armenia, Yerevan. Retrieved https://transparency.am/files/publications/NED_publication_2.pdf (6/12/2017)
- Triscritti, F.(2013). Mining, development and corporate-community conflicts in Peru. *Community Development Journal*, 48(3):437–450.
- Tulloch, J., & Lupton, D.(2003). Defining risk. In: *Risk and everyday life editor Tulloch, J., & Lupton, D.* (page 16–40). London:Sage Books.
- United Nations (UN).(2006). *United Nations field security handbook*. New York, NY: United Nations.
- United Nations Development Programme (UNDP).(2013). The rise of the South: Human progress in a diverse world. *Human Development Report 2013: Armenia*. New York:United Nations
- USAid.(2017). US AID in Armenia. Retrieved <https://www.usaid.gov/Armenia> (22/12/2017)
- Vahlne, J.E., & Johanson, J.(2013). The Uppsala model on evolution of the multinational business enterprise: From internalization to coordination of networks. *International Marketing Review*, 30(3):189–210.
- Vallex.(2015). *Vallex group*. Retrieved from: www.vallex.com
- Veltmeyer, H., & Bowles, P.(2014). Extractivist resistance: The case of the Enbridge oil pipeline project in Northern British Columbia. *The Extractives and Society*, 1:59–68.
- Visser, W.(2011). The age of responsibility: CSR 2.0 and the new DNA of business. *Journal of Business Systems, Governance and Ethics*, 5(3):7–22.
- Vogt, W.P.(2005). *Dictionary of statistics and methodology*. London: Sage Publications.
- Wegner, E.(1998). *Communities of practice: Learning, meaning, and identity*. Cambridge:Cambridge University Press.
- Weick, K.E.(1988). Enacted sensemaking in crisis situations. *Journal of Management Studies*, 25(4):305–317.
- Weick, K.E.(2001). *Making sense of the organization*. Cambridge, UK:Blackwell Business.

- Weick, K.E.(2005). Managing the unexpected: Complexity as distributed sensemaking. In: McDaniel Jr., R. R., & Driebe, D. J. (Eds.), *Uncertainty and surprise in complex systems: Questions on working with the unexpected* (Page 51–65). Berlin:SpringerVerlag.
- Weick, K.E.(2012). *Making sense of the organization*. Volume 2: The impermanent organization. London: Wiley.
- Weick, K.E., Sutcliffe, K. M., & Obstfeld, D.(2005). Organizing and the process of sensemaking. *Organization Science*, 16(4):409–421.
- World Bank.(2007). *The Caucasian tiger: Sustaining economic growth in Armenia*. Washington DC:World Bank.
- World Bank.(2012). *Knowledge brief: Fiscal consolidation and recovery in Armenia*. Volume 45. Washington DC:World Bank.
- World Bank.(2014). Responsible mining info. Retrieved from: <http://www.worldbank.org/en/news/feature/2014/04/15/infographic-responsible-mining-in-armenia>
- World Bank.(2015). *Country snapshot: Armenia*. Yerevan, Armenia: World Bank Group.
- WSP.(2012). *Environmental and social action plan: Vallex group Teghout CJSC*. Issued 07/11/2012. Yerevan:Vallex Group
- Yakovleva, N. (2017). *Corporate Social Responsibility in the mining industry*, London:Routledge
- Yin, R.K.(1994). *Case study research: Design and methods*. London: Sage Publications.
- Zaheer, S.(1995). Overcoming liability of foreignness. *Academy of Management Journal*, 38(2):341–363.
- Zaheer, S., Schomaker, M.S., & Nachum, L.(2012). Distance without direction: Restoring credibility to a much-loved construct. *Journal of International Business Studies*, 43:18–27.

2 From risk management to risk plausibility: Conceptualising risk as sensemaking

Jacob Taarup-Esbensen, Copenhagen Business School and Zealand Institute of Business and Technology

Revise and Resubmit – Risk Analysis (ISSN: 1539-6924)

2.1 Abstract

This paper argues that risk has been conceptualised through four distinct transformations from the functional perspective to the cognitive, the social-cultural and, finally, to the constructionist perspective. Each period conceptualises risk in different ways, as organisations have been faced with risk management challenges they have found difficult to understand and mitigate using the tools available at the time. Conceptualising risk as sensemaking becomes relevant due to the increased volume of information available to the risk manager, engendered by globalisation and access to information technologies; 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 in our understanding of risk has implications for the way researchers and risk decision-makers conceptualise risk events, and analyse risk mitigation and decision-making behaviour by risk managers. This shift presents three different contributions to the current literature. Firstly, 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 possible future events will unfold. Secondly, 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. Finally, 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.

Keywords: risk, sensemaking, risk management

2.2 Introduction

In Teghut and Shnogh in northeastern Armenia, they have known for years that there were copper and lots of it, in the hills surrounding the small village. So, when the mining company Vallex started to do the preliminary work for setting up what was to become one of the biggest Copper mines in the Caucasus, it came as a little surprise among the local population. Several consultation meetings were discussing the project including what was to become one of the tallest tailing dam ever built, raising some 200 meters directly over the village of Teghut and downstream to Shnogh five kilometres away. The villagers were worried about the potential danger that the dam presented but given evidence from Vallex, supported by government experts and consultants from England, that the structure of the barrier would not offer any danger to the community. It did not take long after the announcement of the project that civil society actors were starting to raise concerns, firstly, to the government and the company about the potential environmental impact a construction of this size would have on the two villages if it were to leak or collapse. When pressure on the government was ineffective, they addressed the villagers themselves, to make them aware of the danger. At first, the two communities were happy to hear that their concerns were legitimate and that there were gaps in the information that they had initially received and worked the civil society actors to apply pressure on Vallex. Around the same time construction had started and some of the villagers had begun to work or sold their goods to the mine others had also sold their land to the company. At one point the civil society actors asked the villagers to support their actions against Vallex as presenting evidence that the company was polluting the waterways with waste from the tailings dam. However, they resisted even to a point where they asked the civil society actors to leave the villages and not to return. So, what had changed in the relationship between Vallex, civil society and the villagers? The risk from the now almost complete tailing dam was still the same, and now there was even evidence that their fears were about to come true. What had changed that had made the villagers make sense of the risks and made them change their mind? Even to a point where they threw out the people who were there to protect the villagers against the mining project.

Traditionally, our understanding of risk and the management of uncertainty has been focused on the availability, quality and structure of information (Aven, 2016; Bernstein, 1996). However, the use of technology and increased focus on systematic documentation of risk events has changed the role of the risk manager (Arnoldi, 2009; Lupton, 1999). This has meant that when evaluating the riskiness of the business environment, risk managers have changed their

focus from information seeking and structuring information management (Burgess, 2007; Kemshall, 2014) to, as argued here, information sensemaking, and the management of risk is done through risk engagement. Throughout the history of risk management, the reduction of uncertainty has been the focal point of all activities and the basis for the introduction of increasingly advanced management systems. As information seeking and structuring have become more and more advanced, so has the realisation that risks involving social interaction are not necessarily mitigated by more information and an increasing number of controls, but rather by how the individual risk manager perceives the riskiness of their environment (Power, 2004b; Aven & Renn, 2010).

This paper provides a short account of how risk and risk management have been conceptualised differently over the last century in business and organisational studies by asking the question, how has the conceptualisation of risk management changed over time? The concept has taken on an increasingly dominant role but has also encountered a series of challenges over time, which this paper addresses. This is done by presenting a contemporary inductive understanding of risk management as the result of a meaning creation process by the risk manager, arguing that increased access through communication technologies to information and knowledge about possible risks has changed how individuals conceptualise risk and risk exposure. This development means that decisions on risk mitigation increasingly rely on how risk managers create meaning about their social and physical environment rather than on the amount and quality of information available to them (Campbell, 2006; Hansson & Aven, 2014). This paper investigates how managers evaluate risks based on a sensemaking process (Weick, 2001), where cues and partial pieces of information provide inferred evidence that an event will unfold in a certain way, and how these provide insights into the trustworthiness of the information that they contain in the social and physical environment. The paper examines plausibility as the functional deployment of meaning and how we impose labels on interdependent risk events in ways that suggest how plausible acts of managing, coordinating and distributing will be enacted in a similar manner despite differences in time and space.

The paper is structured as follows. The paper starts by examining how risk has been conceptualised since it was introduced into the business sociology literature before showing how the concept has evolved into four distinct approaches to risk management. It is argued that all four approaches are part of the way we conceptualise risk, and that risk managers increasingly rely on their ability to create meaning and to make sense of the information available to them. The papers argue that managers base their risk decisions on cues that are picked up from the

social and physical environment, and the cognitive evaluation of the plausibility that these subsequent decisions will lead to their mitigation.

2.3 Conceptualising risk

Humans have always been faced with uncertainties that require them to make decisions, some of which could have significant consequences for the people affected (Bernstein, 1996). The ability to master risk and make informed choices that are believed either to mitigate danger or to create new opportunities has been at the heart of human development since the beginning of time. Initially, we attributed these events to the divine and made sacrifices to improve our chances of favourable outcomes. Relying on the wisdom of the supernatural helped us to accept uncertainties as fate and we tried to interfere in this process by practising magical rituals that could improve our chances of a favourable outcome (Douglas & Wildavsky, 1982; Luhmann, 1993:8ff; Lupton, 1999:8). As time progressed, people developed more and more tools that made them determinants of their own fate to a higher degree. Over time, tactics were developed that could be used in war to improve the chance of winning battles, or, on a much smaller scale, processes that ensured that the food we ate was safe and would not make us ill. While people continue to be reluctant to dismiss divine intervention, the development from uncertainty turned something beyond human comprehension into something we as humans could control, constituting one of the major shifts in modern society. Embedded herein was the perception of what risk entailed, transformed from the domain of the belief to the world of social processes, addressing the question of what constituted an acceptable risk. There are overlaps between the different historical perspectives as gaps were identified both theoretically and through empirical studies (Klüppelberg et al., 2014; Lupton, 1999; Roeser et al., 2012; Zachmann, 2014). Different contributors have sought to identify and fill the gaps that have emerged through the application of various ontological stances thereby broadening our combined knowledge about what risks are and how they can be perceived as such. People found that risks could be managed through human intervention and that what we used to call luck, and the skilled people we attributed mystical powers to, were things that could be put under human control. It was not until the late seventeenth or early eighteenth century, however, with the introduction of mathematical probability and systematic measurement, that risk and opportunity found a practical application (Bernstein, 1996). Over time, people developed organisations and institutions that, through the creation of bureaucracies, were able to reduce uncertainty (Zachmann, 2014), such as the development of modern sea maps, which were needed to navigate safely as new worlds were

discovered and new trading routes were explored in the Far East and the Americas, through to the modern legal system that is based on the objective evaluation of evidence (Luhmann, 1993:8f).

The initial approach to risk management was that uncertainties (the unknowns) could be shifted into the domain of risk and opportunity (the known) and thereby be managed (Beck, 1992; Lupton, 1999:8). Risks were in this way treated as objectively identifiable events which could be sensed and categorised in the same way as in the natural sciences. As Thomson (1883:73) observed:

...in physical science, the first essential step in the direction of learning any subject is to find principles of numerical reckoning and practicable methods for measuring some quality connected with it. I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely in your thoughts advanced to the state of Science, whatever the matter may be.

With the introduction of a perspective on nature of risk as a shift in domains centred on how humans interact with it came the idea that nature could and an orthodoxy that it should be conquered (Dionne, 2013). This perspective is thus dominated by the understanding that humans can triumph over nature and that individuals act rationally when confronted with uncertainty and risk (Zinn, 2008). Believing that ‘complete’ knowledge about the natural and social world could be identified and quantified, giving rise to the idea that we as humans can manipulate nature to our own advantage. That risks can be understood and made measurable, quantifiable and dependent on causal factors transformed nature from the domain of arbitrary consequences of natural phenomenon into perceived risks, being anticipatory and subjective (Royal Society, 1983).

By conceptualising risks as measurable and manageable also opened up for multiple interpretations of what constituted objective measurements, their interpretation and the consequences rendered from this insight. As described in the example from Armenia above it is the mechanisms that lead to our realisation of risk rather than the objective, measurable materiality of this risk which prompts a response. The recognition that there can be multiple interpretations of what is perceived as being a risk, to the degree that something might be

measurable but also that there can be different explanations for their origins, changes how organisations and businesses relate to risk on a day-to-day basis. Organisational actors became aware that “Nothing is a risk in itself; there is no risk in reality. But on the other hand, anything can be a risk; it all depends on how one analyses the danger and considers the event” (Ewald, 1991:199). This realisation has been at the centre of risk research and is the subject of much of the work done in the last three decades (Roser, et al., 2012; Zachmann, 2014). While organisations focus on the individual risk events, trying to identify how a certain occurrence could materialise by ascribing causality, it remains to a large extent a science that retrospectively explains the factors that led to some kind of loss or unintended consequence. This has made room for the introduction of paradigms, which to a lesser degree subscribe to a natural science epistemology, but explain instead that risks are created in the relationship between the physical and social world, or later as a purely social construct.

The shift in the conceptualisation of risk can be described through four domains: the functional, cognitive, sociocultural and constructionist perspectives. Inspired by Deborah Lupton’s (1999) categorisation of risk domains, these represent milestones in our knowledge of risk, which has evolved since their adoption into the risk and risk management literature. With this in mind, the domains make sense as they all utilise part of the explanatory argumentation within the practice field, or in an effort to bring in cross-disciplinary approaches where the gaps seemed to be too broad.

2.4 Functional perspective

Within the functional perspective, the conceptualisation of risk begins in the physical world, which can be observed. In order to understand the risks we are exposed to, we assign a probability to certain events that might materialise and are regarded as unfavourable (Arnoldi, 2009:23; Bernstein, 1996). Probability is assigned based on past occurrences and on the assumption that there will be a reoccurrence of the same event, given that nothing else happens. The functional perspective incorporates the basic premise that mitigation is feasible through the management of quantitatively measured events and that reliability is created through repetition. Thus risk is equal to the expected loss that individuals and organisations take into account when taking and evaluating decisions (Aven, 2013). The duty of the risk manager is to transform the unknowns about the physical and social environment into the domain of the known with the use of the right systematic (scientific) approach that quantifies and assigns a numeric probability to a given event. Uncertainties (the unknown) about the world are thereby regarded as physical

events that need to be discovered through use of the right type of risk management techniques and a systematic approach. In this tradition, the mitigation of risk comes from improved engineering practices, which can reduce the chance that certain undesirable events occur or reoccur. Knowledge about risk is gained through experience of how physical objects or processes fail and the actions that were subsequently taken in order to prevent these events from happening again. The main objective is to assign blame either to a physical object or to a process of decision-making which has failed. Organisations thus assign blame in order to assign accountability to certain roles making them responsible for a physical area and the processes that occur within that space (Field, 2003:3).

Risk, risk management and organising are closely related in the functional perspective. Risks are understood as objectively identifiable and risk management as a task for responsible specialists and managers in the effective coordination of activities through the right form of organisational structure (Renn, 2008). The tools to manage these risks are thus closely associated with those we find in the natural sciences, where the focus is on identifying causal relationships between different variables. These variables can be identified within or outside the organisation, but all contribute to the overall picture of possible uncertainties that need to be identified, quantified and eventually mitigated.

2.5 Cognitive perspective

Over time, we have come to the realisation that people do not behave in the predictable and rational way that a functional perspective on risk prescribes. People tend to be much more risk averse when confronted with gains and more inclined to take risks when facing losses (Kahneman & Tversky, 1983; Thaler, 2015:33). In the cognitive perspective, behaviour is regarded as less rational than expected and to a higher degree a reflection of people's self-interests. Cognitive risk researchers regard human behaviour as a combination of altruism and social behavioural norms as the key factors guiding decisions when faced with the uncertainty of a given outcome (Kahneman et al. 1991; Thaler, 2001; 2015). The idea that risk is subjective and prone to cognitive perception does not mean that real physical risks do not exist, but rather that they should be regarded as perceived, that subjective probabilities and risk assignments are prone to individual choice rather than objective rationalities. Risk management is thus value-laden and a product of our cultural and social interaction, a guide for our choices about what elements in the social and physical environment we should regard as threats and what can be ignored. The allocation of probability and the judgement of risk tolerance or level of

acceptability are, in this perspective, seen as two different dimensions. Probability is situated within the domain of risk professionals, who assign probabilities and assess uncertainty, while judgement is regarded as what the risk manager perceives as an acceptable level of risk in terms of risk or opportunity realisation (Hansson & Aven, 2014). In this way, the cognitive judgement of risk allows for the existence of multiple future scenarios, where events might unfold that threaten something of human value, rather than the risk event seen in isolation (Lupton, 2013:638). The focal point of the risk manager is those occurrences or changes in the environment that are considered to be risks or opportunities.

Calling something a 'risk' is to draw attention to it and to recognise a change as important to our subjectivity and wellbeing (Lupton, 2013; Tulloch & Lupton, 2003). A low level of uncertainty does not necessarily mean low risk or a high degree of uncertainty mean a high level of risk, but rather that it is the subjective judgement of risk by the risk manager that will determine human behaviour (Aven & Renn, 2009). This individual evaluation of risk depends on the assessment of the information available, as well as on subjective calculation and personal perception, influenced by fear or personal rationalities, of what such a risk might entail. This leaves room for two categories of unknowns, unexpected occurrences and surprises, both of which include all the risk events that could have affected the assessment but were not thought of at the time (Aven & Renn, 2009). Unexpected occurrences, are unknown unknowns, events that are not yet identified by the scientific community or by risk professionals. They are events that could have been investigated, quantified and subsequently assigned a probability to, but we did not think of when we did our risk assessment. Surprises are occurrences that are regarded as known unknowns, where the risk decision-maker judged that the probability of a given risk occurrence would be so rare (outliers) that the event should not be included in the assessment. This means that risks are perceived as pre-existing in nature, and it is the cognitive recognition of these through scientific measurements and calculations which forms the platform that enables their control (Gephart, et al., 2009). It is through our understanding of cognitive judgement processes and how managers conceptualise and assess risks that it is possible to enhance the way that individuals make qualified judgements about events in their environment. Thus objective facts about risks and their occurrence are identified by scientific methods, subject to bias—either their own or that of the organisations they represent—by decision-makers whose role is to allocate resources to risk mitigation.

The subjective reaction to objective probabilities has led risk research to focus on how organisations evaluate their environment and the role of the risk manager. Decisions about risks

are based on what is described as ‘affect’, ‘feeling’, ‘intuition’, ‘emotion’ or even ‘gut feeling’, that precede and are separate from reason (Lupton, 2013; Slovic, et al., 2004; Slovic & Västfjäll, 2010). The risk is not only judged based on objective measurements but relies as much on the risk manager, who rationalises his own behaviour based on subjective criteria.

Here we acknowledge that trust and the legitimacy of the risk manager are now central to the evaluation of risk outcomes. Organisations are as focused on legitimisation of their actions and evaluation of given changes as they are on reducing the probability of a given risk event occurring. This is supported by studies on risk perception, which demonstrate that risk events cannot simply be blamed on ignorance or irrationality, but that many of the reactions can be attributed to a sensitivity to technical, social and psychological qualities of uncertainty that are not included in technical risk assessments—for example, qualities such as uncertainty in risk assessments, perceived injustice in the distribution of risks and benefits, and aversion to being exposed to risks that were involuntary, not under one’s control, or dreaded (Slovic, 1993). Building trust and legitimacy is a time-consuming exercise and can be a fragile concept to work with, as it takes a lot of time and effort to build and can be easily lost (Earle, 2010). However, this also emphasises that when trust is present, it can be utilised to exploit opportunities which under objectively evaluated circumstances would be considered too risky.

This realisation has entailed an increased focus on institutionalising the management of risk perception as a cognitive phenomenon rather than creating an even more comprehensive system of governance that could ultimately prove inadequate. Building trust is thus the focal point of organisational risk mitigation efforts, rather than the simple provision of objectively accurate information. The institutional solution to avoid losses which result from a lack of legitimacy or an inability to be regarded as legitimate is focused on (re-)gaining trust as a key risk parameter (Brown, 2014; Gifford & Kestler, 2008). For that reason, adequate institutional regulatory frameworks provide stable conditions where stakeholders know what to expect from the organisation and offer incentives that will facilitate trust building. These are arranged in such a way that they contribute to overcoming the inherent distrust of change induced by the organisation through its interactions with its environment and which can be perceived as putting stakeholders at risk or subjecting them to uncertainty about future outcomes.

2.6 Sociocultural perspective

The sociocultural perspective on risk presents an alternative explanation for the interaction between the individual risk manager and his physical and social environments. Risk is in this

perspective incalculable, in contrast to both the functional and cognitive perspectives that regard risk as a real presence in the environment which either needs to be discovered by science or, in the latter perspective, be perceived as relevant. Beck (1992:21) defined the concept of risk “as a systematic way of dealing with hazards and insecurities, induced and introduced by modernisation itself”. While his theory on risk has been criticised for lacking the possibility for agents to act with the aim of mitigation, disregarding that risks also existed before industrialization and that it is not possible test if the theory is valid (Bergkamp, 2017; Campbell & Currie, 2006). But highlights the need for a broader understanding of risks that is associated with a lack of or insufficient knowledge about how people and society are subject to dangers from their environment, being manmade or natural. That risk is not only about events but that people are subject to them regardless of their cognition hereof, they are in essence ‘democratic’ in the way that “Risks are, essentially, man-made, incalculable, uninsurable threats and catastrophes which are anticipated but which often remain invisible and therefore depend on how they become defined and contested in ‘knowledge’” (Beck, 2010:261).

A further critique of Ulrich Becks risks as ‘democratic’ come from the understanding that some members of society has resources available to them that place them in a position where they are able to mitigate risks easier than others. It is no longer enough that one is able to identify and perceive risk; one must also have the ability to handle and resources for mitigation (Campbell, 2006). Risk is in this sense both socially and culturally embedded in context, and meaning about what constitutes risk varies from one social group to another. Trying to assess risk is therefore necessarily a social and political exercise, even when the methods employed are the seemingly technical routines of quantitative risk assessment (Aven & Renn, 2009). Risk can no longer be regarded as something purely within the realm of the subjective domain: it is rather a result of the social and physical environments’ impact on our lives which determines the level of risk exposure and we have more or fewer resources for mitigation depending on the financial, cultural and social resources available to us.

The introduction to the sociocultural perspective has given politicians the arguments needed to make risk and the management of uncertainty the subject of policy (Bradbury, 1989). For example, the British cabinet office under Prime Minister Tony Blair proclaimed, “handling risk—both opportunity and threat—is increasingly central to the business of government” (Blair, 2002; Power, 2004a). This move into the realm of policy also meant that our understanding of risk became detached from the individual and, to some degree, even from organisational decision-makers. According to Giddens (1999), and influenced by Luhmann (1993), this is a

'risk society' made up of distinctions, where hazards are separated from what is perceived as danger: "life in the Middle Ages was hazardous, but there was no notion of risk and there doesn't seem in fact to be a notion of risk in any traditional culture" (Giddens, 1999:3). Danger was experienced as a given, and the concept of risk management was regarded as a way for people to regain control of their social and physical environment, but the resources available to them determined how much control they could actually have. This places the individual in a position where danger and hazards are naturalised outside his or her direct control and efforts to control these falls within the realm of people with power who act as mitigators of risk and, eventually, as managers of risk for the less powerful. The role of the risk manager thus becomes one of privilege and is related to a position of power and resources. Both risks and opportunities are therefore under the control of actors who can, by directing their willpower and the resources of society, reduce exposure to certain individuals and grant the controlled dominion to the entrepreneurial risk-taker. Also, the nature of risk has changed from being local to being global, less identifiable and with a bigger impact, and we turn to actors with more power who are outside our own sphere of control in order to control the factors affecting us (Beck, 1992, 2007; Gephart et al., 2009).

This gives rise to a risk perspective where people rely on political decision-makers to create the rules of the game and where the individual becomes increasingly detached from being responsible for his own actions. In this way, we turn to the institutions of society for advice on how to behave rather than our individual moral compass, and increasingly blame society for our own individual failings. We attribute responsibility to those institutionalised actors whom we believe to be or decide are representative of the unfolding of a given event and by that assign blame outside our own control (Douglas, 1992). Contributing blame to individual actors who are representing different institutions thus becomes central to our understanding of the risk management discourse.

2.7 Constructionist perspective and risk as sensemaking

If a risk is constructed in the minds of individual risk managers through a process of attribution of responsibility, how then do we describe and manage risks? The constructionist risk perspective continuously challenges the organisation's basic perceptions of what constitutes the realness of risk and what the risk manager regards as known about the world. Here, the notion of risk is constituted by the realisation that our knowledge is never fully objective or knowable outside our belief systems and moral position: "what we measure, identify and manage as risk is

always constructed via pre-existing knowledge and discourses” (Lupton, 1999:29). In this sense, decisions are a social process which is negotiated between the individuals and their social environment. People are not passive recipients of the dangers of society and predetermined to be exposed, based on their societal and cultural background. The focus of the risk manager is how the individual perceives, evaluates and takes action on changes occurring, taking into account that these are not necessarily things that the individual is simply exposed to but are as much co-constructed by the individual. This highlights that knowledge and cognitive awareness influence how people behave independently of their societal status and the resources available to them (Taylor-Gooby & Zinn, 2006), and that risk managers can be the originators of further risks as they balance different concerns, profits, safety and reputation, often with incomplete information (Aven, 2016; Mikes, 2011). In this sense, risk managers are assessing not only the riskiness of their own social and physical environment, but also the legitimacy of the variety of sources that contribute to the assessment (Brown, 2014). Within this perspective, not only are dangers events that we mentally construct, but our perception of these dangers is also something that is socially and culturally created (Burgess, 2015:56). We, as individuals, create meaning about individual events in our physical and social environments and how risky they are based on the realness of these, but as much to what degree we regard the source of these events as legitimate.

The constructionist perspective is thus concerned with the perception of risk, independent of any objective hazard that might or might not exist. This perception is influenced by both the social and physical environment, and by our previous experiences and knowledge about how the world functions, as well as to what degree we regard the sources as believable, therefore also determining how we organise and take decisions based on what we believe to be known and how we determine something as constituting an unknown which could potentially influence our future decisions (Bammer & Smithson, 2008:7; Mikes, 2011). Furthermore, the action we take in order to mitigate these is primarily based on our perception of the realness of these events and therefore our cognitive ability to perceive them as making sense as risks that require us to act. As we encounter something new or unique, we need to test if the mental schema we have constructed for how the world works is also applicable to the event we are encountering.

If individual or organisational risk is essentially a construction which is formulated in dialogue with stakeholders, it can be described as a process of making sense of reality (Weick, 1988, 2001, 2005), and individuals organise and take decisions based on what they believe to be known or in order to know what constitutes the unknowns in their environment, which could

potentially influence their decisions and actions (Bammer & Smithson, 2008:17; Mikes, 2011). Weick's work is centred on how individuals and groups react to changes in their environment and the process of creating meaning out of the available information: how we evaluate and take decisions when confronted by change is founded in seven steps that make up the process of how individuals create meaning (Weick, 2012:129ff). Weick, Sutcliffe, and Obstfeld (2005:409) explain this process of sensemaking as "the ongoing retrospective development of plausible images that rationalise what people are doing". Firstly, it depends on who they are, or their identity, as they perceive it in the social context in which they participate; secondly, meaning is based on the information available and our retrospective knowledge of how the world functions. Thirdly, because the social and physical environments are partly constructed by attributing meaning to their individual elements, the enactment or our reaction is part of how we make sense of things, including determining if something constitutes a threat or an opportunity; fourthly, it depends on how the social environment reacts and possibly corrects our constructed environment. Fifthly, sensemaking is an ongoing process and, as we become more knowledgeable about what is going on in our environment, we build upon those decisions which have proved successful in the past, thereby improving our ability to handle uncertainty that we are faced with as it arises. Sixthly, we extract cues from our environment that either reinforce or hinder certain conclusions from becoming salient; finally, we base our sensemaking on whether or not the meaning we have created seems plausible as we collect fragments of information and cues from our surroundings, filling in the missing pieces with experience and rational thinking.

Given that risk is socially constructed, and that in order for something to be regarded as such there must be individuals who are making sense of the world as being a risky place (Battles, et al., 2006; Gephart et al., 2009; Power, 2016:6), the risk manager is the one who is making sense of the social environment on the organisations behalf, creating meaning about the risks and opportunities it is faced with, but is not necessarily in a position to take action on them. The starting point for risk assessment is the risk manager, as there can be no creation of meaning without the individual and thus no risk without the acknowledgment thereof. The physical and social environments do not have an inherent meaning outside our cognition and our ability to attribute meaning to them (Berger & Luckman, 1966:43ff), and action on risk can only be taken if there is a perceived need to take action.

When the risk manager creates meaning, he looks at the experiences that he had in the past and makes connections between the actions that were taken then and the plausibility that similar actions will produce the same result (Weick, 1988, 2005). We live in a world where there has

never been so much information available to us and it is relatively easy to acquire knowledge about given events (Miller, 2009), but despite this we rely more on our own experiences and the sensemaking of the past more than on the experiences of others, and this is also true for the risk manager. As described in the section on cognitive perspective on risk, objective facts do not always predict human behaviour, because what seems like an objectively identifiable fact to some might be seen as wishful thinking to others, simply because experience tells them so. Think about when you are in an aeroplane and experiencing some rough turbulence and the many different reactions that people have in the seats around you. Everyone knows that airlines provide some of the safest transport in the world, and everyone around you generally accepts this information; yet despite this you will find people who are truly scared and sometimes hysterical, while others seemingly sleep calmly, but all are participating in the same event. We gather knowledge about the world around us from multiple sources, through our experiences and the experiences of others (Weick, 2005). Past experience thus becomes part of the mental map of what options risk managers have when confronted with seemingly similar events. Sensemaking is thus a retrospective process where the risk manager uses past experiences to judge what makes sense in the future. Judging what constitutes a risk is not only the estimated chance of an event, as prescribed by the functional perspective, or our ability to cognitively identify events as risky, but is also informed by past and present knowledge of similar occurrences.

The action the risk manager takes, or how we act in the social world, influences what in the end makes sense (Weick, 1988; Weick et al., 2005). As the risk manager encounters something new or unique, he needs to test if the mental schema of how the world works is also applicable for new events that are encountered. He needs to determine if this is a threat which needs to be avoided or an opportunity that can be explored. In this way, he tests his risk schema through experimentation, where new events are compared with past ones experienced and the useful strategies applied in the past are examined to see if they may prove effective in dealing with this new event. This is at the same time a test of the 'realness' of the event by identifying the structure, constraints and opportunities that the event entails (Aven, 2013). This does not exclude the realness of the world such as roads, gas pipes, cars, etc., but is a strategy for testing how significant this realness is when we determine its importance. As such, objects are inconsequential until they are acted upon and incorporated into our mental retrospective map of events, situations and past explanations (Weick, 1988). The risk manager thereby labels what is interpreted as a risk based on his experiences of the past, linking objects that have been

characterised as risky in the past with situations that are not necessarily exactly the same but contain similar elements.

The process of sensemaking is both a subjective and cognitive process, and inter-subjective and social, in the sense that it never happens in a vacuum of information and knowledge but is always an element in interaction between these (Gephart, 1993; Weick et al., 2005). In order to ensure a correct assessment of the risk that the risk manager is faced with, he relies on his social environment to correct any misconceptions—for example, in the form of risk management systems (Aven, 2016; Kaplan & Mikes, 2012). Most of the events that are encountered in our everyday lives have some ambiguity built into them. They can be interpreted as openings for new positive development, or as dangers that we need to be aware of and avoid. In this way, the risk manager relies on his social connections and risk management systems to help him make the right decision on how to interpret a given situation. In that sense, risk identification is a social process that involves multiple stakeholders who affect the mental map of the risk manager, labelling events as risks and the subsequent actions taken for avoidance or mitigation. This does not mean that risk events will always be mitigated, as the social process can act as an amplifier for several courses of action that can result in both positive and negative outcomes.

Sensemaking is an ongoing and continuous process where the risk manager excludes alternative explanations for what he believes to be true until there are no contradictions or he finds no alternatives for action (Weick et al., 2005). The process of creating meaning and attributing labels to events in the world is never-ending. The risk manager constantly evaluates new experiences and compares them to the schema and labels already created about how the world works. Sensemaking is not a process that can be stopped or hindered, as he is constantly being exposed to different schema of meaning creation in his environment that continually offer plausible explanations for how a given situation should be interpreted.

There is a connection between the ability to make decisions which will reduce and mitigate risks, the complexity of the event, and the amount of time available to the risk manager. As time is a limited resource and the risk manager needs to make a choice between alternative actions (Burns & Slovic, 2012; Gephart et al., 2009), there are two central elements in the sensemaking process that determine the actions taken. Cues guide us in making the right choice and in our evaluation of the plausibility that the choice will lead to the desired outcome (Weick et al., 2005). Cues are partial pieces of information that provide inferred evidence that an event will unfold in a certain way; they provide insights into the trustworthiness of the information

that they contain. Cognitive risk researchers have shown that managers make decisions based on 'intuition' or 'gut feeling' without qualifying this black box (Lupton, 2013; Slovic et al., 2004). The concept of cues provides a basis for how we can explore the emergence of these cognitive processes that lead the risk manager to make sense of events as they are unfolding and to take the necessary action to mitigate possible outcomes in the face of fragmented and incomplete information. We are sensitive to the behaviour of others and may include behavioural cues even when others do not regard a risk as sufficiently salient to require an expenditure of energy (Dunwoody & Griffin, 2015). This makes proactive risk management a complicated task, where individuals try to predict the behaviour of others, even when they themselves are unaware of the signalling effect of their own actions.

In order to safeguard ourselves against the misinterpretation of cues, we rely on a final barrier of reasoning, plausibility, which safeguards us against creating false or incomplete meaning of our social environment (McKenzie, 2010:191; Weick, 2005). When the risk manager has gone through the process of retrospective meaning creation, taking into account possible actions and the actions of others, how the social environment has made sense of events, time and possible cues, then he is able to create meaning about the riskiness of the world, and he ultimately evaluates whether events correspond with the mental image of the world he has created. Is the event plausible: does it all add up to what he would consider a reasonable depiction of reality, or are there elements that will require further investigation? Answering this question is a test of the coherence of events—whether what the risk manager is witnessing contains illogical leaps that strain his cognitive reasoning to a degree that requires revisiting his perceptions of the realness of the world around him. Based on the knowledge of past events and the cues received from the social and physical environments, if the event is as it is envisioned, then it is believable. By relying on having 'sufficient' information, the risk manager is enabled to make decisions that are timely and will, based on his mental schema, provide a good chance of success. The risk manager is thus 'programmed' to take a risk on the accuracy of his own mental model, sacrificing accuracy for faster decisions. That accuracy is sacrificed for plausibility of course has implications when it comes to the quality and impact of the decisions taken, but, with experience, retrospective evaluation and the reactions from our environment as indicators of plausibility, and thus providing cues to what should be included in future decisions, he is continually improving his ability to make accurate sense of risks and opportunities.

2.8 Conclusion and discussion

Risk and the management of risks are closely connected with our ability to identify something as such. Throughout history, we have progressively moved towards improving our own cognition and abilities, towards understanding and manipulating the nature of events unfolding in our environment. Initially, risk management was focused on filling the knowledge gap, and efforts were centred on gathering and organising information so that risk managers could take well-informed and correct decisions. Over time, and amplified by the introduction of information technology, we have come to realise that having information available is not the same as being knowledgeable or necessarily improving our ability to make decisions to mitigate risks. Our ability to process all the ‘knowns’ that we have available to us, even with the help of computers and technology, is not enough to consistently make the correct decisions that will reduce risk or, for that matter, identify opportunities. The risk manager’s ability to manage risk has focused on the ability to make sense, in contrast to the validity of their claims. We are more inclined to take decisions when our estimates of the risks seem plausible than when they are objectively correct.

The paper contributes through a conceptualisation of risk and risk management as sensemaking and has several implications for research and practitioners. The management of risk is increasingly focused on how events are perceived rather than on the ability to describe them accurately. Here, the object is the perception and the subsequent actions taken by the individual risk manager rather than the event itself. While risk and risk management remain central to the organisation, the shift from a traditional risk management focus on identification to perception constitutes a significant shift in how risks are identified and the subsequent decisions taken to mitigate or avoid them. This form of risk management means that risks are no longer exclusively regarded as something that people are exposed to from their surroundings. The risk manager is a co-producer of risk, however, both within an organisation in terms of how he interacts and collectively makes sense, and in how he is influenced by different external stakeholders who provide cues on meaning and alternatives for action. As described by Michael Power (2004a), risk managers are becoming accountable for the outcome of their decisions and therefore increasingly focus on the risks to themselves, with a view to avoiding responsibility, blame and financial penalty. Realising that risk is unpredictable in this way and is outside the cognitive control of individuals is where the management of risk becomes a matter of dispersing responsibility and creating organisational risk management fragmentation, rather than risk mitigation and elimination. Rather than ensuring that all possible threats are identified and

mitigated, the management of risk is hence the identification of cues or indicators that alert the risk manager that changes in the social or physical environment, presenting some form of uncertainty that requires attention. This change has three implications for research into how organisations identify risk and how the success or failure of risk management is perceived.

Firstly, the shift in perspective from the risk management of knowns to the risk management of everything affects how the management of risk and uncertainty is practised. The realness of risk changes from the risk manager's ability to measure and identify causes to risk as meaning being created and acted upon. Drawing on all four perspectives, there is a noticeable shift in the way that risks are perceived, from being information-driven to our ability to process this information, and finally towards a conceptualisation where information becomes one of the several interconnected factors that determine the actions of the risk manager. This shifts the concept of risk management from a disciplinary and backward-facing practice, involving narrowly defined technical expertise based on natural science, to a forward-looking and anticipatory practice, providing knowledge leadership and strategic advice to top management, even without elaborate calculations (Mikes, 2011). This shifts our perspective of the role of management and leadership in organisations, involving both making decisions about risks and looking towards opportunity-seeking activities. In this new role, the risk decision-maker is empowered not only to reduce uncertainty and manage risks, but also to identify possible opportunities arising from unexpected occurrences and surprises. Given this perspective, managers are now increasingly responsible for maintaining a risk culture which continually enacts and maintains good risk mitigation practices rather than enforcing a set of rules based on knowledge about previous errors. Successful risk managers understand that people rely on their experience and look for plausibility rather than validity that can justify certain actions, and that in this context risk management systems are cues for good behaviour rather than rules.

Secondly, by basing our risk management approach on the sensemaking abilities of the risk decision-maker, we experience a shift in how organisations approach systems and standards in the future. As Power (2004a) has described, the systems of the future are 'intelligent': they not only document the experiences of the organisation and knowledge from others into a coherent risk management approach, but also take into account how the system in itself is producing cues that provide a platform of plausible risks to others. This means that the role of the internal control system, as a container of controllability and as an unquestionable principle, is undergoing change, not as a guiding principle for risk management practice but on an epistemological level. Where the nature of the risk management system used to be the

systematisation of knowledge, it is changing its role to being a vehicle for our retrospective decision-making and the plausibility of future outcomes, thereby institutionalising risk management, where decisions are evaluated based on their legitimacy and the decisions the organisation has taken beforehand which have been systematised into management standards.

Thirdly, this perspective does not change the fact that risks are real, but it does have an impact on how risk managers relate to them. As the organisation relates to its stakeholders, it not only needs to provide them with evidence that its products, processes and management practices are safe, but also that every contact they have can be a potential risk event, and that physical and social risk are interrelated and inseparable from each other and are based on an evaluation of their riskiness. The risk manager's assessment of the level of uncertainty is based on an estimation of the plausibility which is ascribed to the event and not necessarily the likelihood of the event occurring. In this sense, the legitimacy of the risk manager is as much at stake as that of the organisation, as trust in his ability to take decisions that can affect individuals, communities and organisations in his social environment becomes a source of risk in itself. The traditional view of the organisation as separate from its surroundings is thus challenged, as the role of the risk manager becomes one of managing perceptions as much as managing real risks.

2.9 References

- Arnoldi, J.(2009). *Risk: An introduction*. Cambridge: Polity.
- Aven, T.(2013). Practical implications of the new risk perspectives. *Reliability Engineering and System Safety*, 115:136–145.
- Aven, T.(2016). Risk assessment and risk management: Review of recent advances on their foundation. *European Journal of Operational Research*, 253:1–13.
- Aven, T., & Renn, O.(2009). On risk defined as an event where the outcome is uncertain. *Journal of Risk Research*, 12(1):1–11.
- Aven, T, & Renn, O.(2010). *Risk management and Governance – Concepts, Guidelines and Applications*, London:Springer.
- Bammer, G., & Smithson, M.(2008). *Risk and uncertainty: Multidisciplinary perspective*. London: Earthscan.
- Battles, J.B., Dixon, N.M., Borotkanics, R.J., Rabin-Fastmen, B., & Kaplan H.S.(2006). Sensemaking of patient safety risks and hazards. *Health Services Research*, 41(4p2):1555–1575.
- Beck, U.(1992). *Risk society*. London: Sage.
- Beck, U.(2007). *World at risk*. Malden, MA: Polity Press.
- Beck, U.(2010). Climate for Change, or How to Create a Green Modernity?. *Theory, Culture & Society*. 27(2–3):254–266
- Berger, P. & Luckmann, T.(1991). *The social construction of reality*. London:Penguin Books.
- Bergkamp, L.(2017). The concept of risk society as a model for risk regulation – its hidden and not so hidden ambitions, side effects, and risks. *Journal of Risk Research*. 20(10):1275-1291.
- Bernstein, P.L.(1996). *Against the gods: The remarkable story of risk*. New York, NY: John Wiley and Sons.
- Blair, T.(2002). *Risk: Improving government's capability to handle risk and uncertainty*. London: Strategic Unit Report, Cabinet Office.
- Bradbury, J.(1989). The policy implications of differing concepts of risk. *Science, Technology & Human Values*, 14(4):380–399.
- Brown, P.(2014). Risk and social theory: The legitimacy of risks and risk as a tool of legitimation. *Health, Risk and Society*, 16(5):391–397.
- Burgess, A.(2007). The making of the risk-centred society and limits of social risk research. *Health, Risk and Society*, 8(4):329–342.

- Burgess, A.(2015). Social construction of risk. *The SAGE handbook of risk communication*. Thousand Oaks, CA: Sage.
- Burns, W.J., & Slovic, P.(2012). Risk perception and behaviours: Anticipating and responding to crisis. *Risk Analysis*, 32(4):579–582.
- Campbell, S.(2006). Risk and the subjectivity of preference, *Journal of Risk Research*, 9(3):225-242
- Campbell, S. & Currie, G.(2006). Against Beck – In Defence of Risk Analysis. *Philosophy of the Social Sciences*. 36(2):149-172.
- Dionne, G.(2013). Risk management: History, definition and critique. *Risk Management and Insurance Review*, 16(2):147–166.
- Douglas, M.(1992). *Risk and blame: Essays in cultural theory*. London: Routledge.
- Douglas, M., & Wildavsky, A.(1982). *Risk and culture: An essay on the selection of technological and environmental dangers*. Los Angeles, CA: University of California Press.
- Dunwoody, S., & Griffin, R.J.(2015). Risk information seeking and processing model. In: *The SAGE handbook of risk communication*. (page 102-116). Thousand Oaks:Sage.
- Earle, T.C.(2010) Trust in risk management: A model-based review of empirical research. *Risk Analysis*, 30(4):541–574.
- Ewald, F.(1991). Insurance and risk. In: Burchell, G., Gordon, C., & Miller, P. (Eds.), *The Foucault effect: Studies in governmentality* (Page 197–210). London: Wheatsheaf.
- Field, P.(2003). *Modern risk management: A history*. London: Risk Books.
- Gephart, R.P.(1993). The textual approach: Risk and blame in disaster sensemaking. *Academy of Management Journal*, 38(6):1465–1514.
- Gephart, R.P., Van Maanen, J., & Oberlechner, T.(2009). Organizations and risk in late modernity. *Organization Studies*, 30(02/03):141–155.
- Giddens, A.(1999). Risk and responsibility. *The Modern Law Review*, 62(1):1–10.
- Gifford, B., & Kestler, A.(2008). Towards a theory of local legitimacy by MNEs in developing nations: Newmont mining and health sustainable development in Peru. *Journal of International Management*, 14:340–352.
- Hansson, S.O., & Aven, T.(2014). Is risk analysis scientific? *Risk Analysis*, 34(7):1173–1183.
- Kahneman, D. & Tversky, D.(1983). Choices, Values, and Frames. *American Psychologist*, 39(4):341-350.

- Kahneman, D., Knetsch, J.L. & Thaler, R.H.(1991). Anomalies - The Endowment Effect, Loss Aversion, and Status Quo Bias. *Journal of economic perspectives*, 5(1):193-206.
- Kaplan, R.S., & Mikes, A.(2012). Managing risks: A new framework. *Harvard Business Review*, June:49–60.
- Kemshall, H.(2014). Conflicting rationalities of risk. Disputing risk in social policy: Reflecting on 35 years of researching risk. *Health, Risk & Society*, 16(5):398–416.
- Klüppelberg, C., Straub, D. & Welpel, I.M.(2014). Risk – A multidisciplinary introduction. New York, NY: Springer.
- Luhmann, N.(1993). *Risk: A sociological theory*. New York, NY: Transaction Publishers.
- Lupton, D.(1999). *Risk*. London: Routledge.
- Lupton, D.(2013). Risk and emotion: Towards an alternative theoretical perspective. *Health, Risk & Society*, 15(8):634–647.
- McKenzie, R.B.(2010). *Predictably rational: In search of defence of rational economic behaviour*. London: Springer.
- Mikes, A.(2011). From counting risk to making risk count: Boundary-work in risk management. *Accounting, Organizations and Society*, 36, 226–245.
- Miller, K.D.(2009). Organisational risk after modernism. *Organisational Studies*, 30(02/03), 157–180.
- Power, M.(1997). *The audit society*. Oxford: Oxford University Press.
- Power, M.(2004a). Counting, control and calculation: Reflections on measuring and management. *Human Relations*, 57:765–783.
- Power, M.(2004b). The risk management of everything. *Balance Sheet*, 12(5):19–28.
- Power, M.(2016). *Riskwork: Essays on the organizational life of risk management*. Oxford:Oxford University Press.
- Renn, O.(2008). *Risk governance*. London: Earthscan.
- Roeser, S., Hillerbrand, R., Sandin, P., & Peterson, M. (Eds.)(2012). *Handbook of risk theory: Epistemology, decision theory, ethics and social implications of risk*. New York, NY: Springer.
- Royal Society.(1983). *Risk assessment: Report of a Royal Society study group*. London: Royal Society.
- Slovic, P.(1993). Perceived risk, trust and democracy. *Risk Analysis*, 13(6):675–682.

- Slovic, P., Finucane, M.L., Peters, M., & MacGregor, D.G.(2004). Risk as analysis and risk as feelings: Some thoughts about affect, reason, risk, and rationality, *Risk Analysis*, 24(2):311–322.
- Slovic, P., & Västfjäll, D.(2010). Affect, moral intuition, and risk. *Psychological Inquiry*, 21(3):387–398.
- Taylor-Gooby, P., & Zinn, J.O.(2006). The emergence of risk in social science. In: Taylor-Gooby, P., & Zinn, J.(Eds.), *Risk in social science*. Oxford: Oxford University Press.
- Thaler, R.(2001). From Homo Economicus to Homo Sapiens, *Journal of economic perspectives*, 14(1):133-141.
- Thaler, R.(2015). *Misbehaving: The making of behavioral economics*. New York, NY: Norton and Co.
- Thomson, W.(1883–1889). *Electrical units of measurement: Popular lectures and addresses*. Retrieved from: <https://archive.org/stream/popularlecturesa01kelvuoft#page/72/mode/2up>
- Tulloch, J., & Lupton, D.(2003). *Risk and everyday life in defining risk*. London: Sage Books.
- Weick, K.E.(1988). Enacted sensemaking in crisis situations. *Journal of Management Studies*, 25(4):305–317.
- Weick, K.E.(2001). *Making sense of organization*. Oxford: Blackwell.
- Weick, K.E.(2005). Managing the unexpected: Complexity as distributed sensemaking. In: McDaniels, R. R., & Driebe, D. J. (Eds.), *Uncertainty and surprise in complex systems* (pp. 51–65). Berlin: Springer-Verlag.
- Weick, K.E.(2012). *Making sense of the organization. Volume 2: The impermanent organization*. Hoboken, UK: Wiley.
- Weick, K.E., Sutcliffe, K.M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4):409–421.
- Zachmann, K.(2014). Risk in historical perspective: Concepts, contexts, and conjunctions. In: Klüppenber, C., Straub, D., & Welp, I. M. (Eds.), *Risk: A multidisciplinary introduction*. (page 3-35). London: Springer.
- Zinn, J.O.(2008). Heading into the unknown: Everyday strategies for managing risk and uncertainty. *Health, Risk & Society*, 10(5):439–450.

3 Making sense of community risk: Mining MNEs in Armenia managing community relations

Jacob Taarup-Esbensen, Copenhagen Business School and Zealand Institute of Business and Technology

3.1 Abstract

Using cases from mining MNEs in Armenia, this paper contributes by conceptualising what community risk is, providing an alternative to conventional risk management approaches applied within the MNE literature. Conventional risk management approaches have been struggling to capture the increasingly complex risks originating from local communities situated geographically close to the mine site, defined as communities of place, and communities of interest, who are interest groups who either oppose or support mining. Community risks arise when communities of place take action against the mining MNE, based on how they perceive and create meaning about the riskiness of the changes that the company has introduced into their physical and social environment. In contrast to the conventional perspective of risk management that investigates primarily objectively identifiable risks, this meaning creation sometimes prompts communities of place to take action that can lead to the disruption of company operations and thereby pose a risk to the company. Contemporary MNE risk management approaches struggle to capture these types of risk, as they focus on identifying risks originating from more organised groups like governments and communities of interest. The paper argues that community risk is to be regarded as a precursor to political, financial and cultural risk, and that communities of place engage with the more organised communities of interest in order for them to commit resources which will spur financial, political and cultural actors to engage with the mining MNE.

Keywords: communities of place, communities of interest, risk management, multinational companies, mining

3.2 Introduction

This paper argues that MNEs experience community risk events that pose a unique source of uncertainty that they need to manage, and these types of risk are becoming increasingly salient because of the ability of local communities to communicate efficiently beyond their confined geographical area. The paper offers a conceptual understanding of community risk as it is managed by mining multinationals (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 or technical risks, but rather because of the lack or loss of support from nearby local communities (BSR, 2003; Franks & Cohen, 2012; Owen & Kemp, 2012). These types of risk are becoming increasingly important for all companies, and MNEs especially, as globalisation has made communication technologies widely available even to the most remote areas. These localised risks have not only caught the attention of scholars but also that of industry organisations (ICMM, 2015), institutional investors (IFC, 2015) and civil society actors, who have found that local communities can be powerful allies in promoting their agenda (Ecolur, 2015; Teghut, 2015). For the mining MNE, this means uncertainty about the nature of the involvement of local communities as independent stakeholders, but it also poses risks to the organisation from more institutionalised sources such as government, investors and civil society actors and other stakeholder groups, who through communication technology have up-to-date information from these local communities. Several attempts have been made to understand risks originating from local communities and the strategies deployed for mitigating them (Bekefi, et al., 2006; Kemp & Owen, 2013; Kytte & Ruggie, 2005; Warnaars, 2012). The focus here has been on understanding how business identifies and reacts to community grievances and the effects that corporate activities can have on local communities. These types of risk have also been investigated in areas like health and welfare, social protection and development studies in the form of social risk (Holzmann, et al., 2003; McKinnon, 2010). While the concept has flourished within the field of practice and in institutions like the World Bank for some time, it is now also the subject of academic research, as mining MNEs are increasingly experiencing risks originating from local communities which are willing and increasingly have the means to apply pressure to organisations to conform to their expectations (Graetz & Franks, 2015; Gruev-Vintila & Rouquette, 2007; ICMM, 2015). Community risk can take many forms, from small-scale demonstrations all the way to blockades or even vandalism of corporate property. In some cases, events like these can develop further by involving stakeholders who

have more resources at their disposal, such as political actors, investors or civil society groups that also have the means to endanger the mining MNE's ability to operate efficiently by applying political, financial or cultural risks (BSR, 2003; Delannon, et al., 2016; Graetz & Franks, 2015; Warnaars, 2012).

The paper is structured as follows. Firstly, the key term 'community' is defined as communities of place and communities of interest, two distinct groups that can influence the mining MNE. This conceptualisation is then related to a sociological perspective of risk, termed community risk, which is then related to the MNE risk management literature. Secondly, the methods used to answer the research question and support the conclusion are described through two case examples from mining MNEs operating in Armenia. Thirdly, an analysis of the findings is presented, using the concept of community risk and how mining MNEs manage uncertainty related to communities of place and communities of interest. Finally, the paper concludes with a discussion on the findings and the implications that arise from the conceptualisation of community risk in the MNE literature.

3.3 Theory

The concept of community risk lacks theoretical clarification within the MNE literature and thus needs to be defined more closely. This section is an attempt to clarify and concretise the concept's boundaries and application within the MNE risk management literature, firstly by conceptualising communities of place and communities interest as two distinct groups, and secondly, by establishing that the sociological understanding and approach to risk is a viable alternative to the traditional approach found in the literature. Finally, the paper presents a conceptualisation of community risk as an especially salient risk for MNEs, which are more exposed to these localised risks because they are subjected to liability of 'outsidership' and endure higher costs because they have less knowledge about local business conditions than local domestic companies (Johanson & Vahlne, 2009; Zaheer, 1995).

3.3.1 Communities of place and communities of interest

Wegner (1998:47) described communities of practice as "the prime context in which we can work out common sense through mutual engagement.", stating that "human engagement in the world is first and foremost a process of negotiating meaning" (Wegner, 1998:53). While Wegner referred to communities in a specific sense—namely, as brought together by the activities they engage in—it is possible to contextualise communities much more broadly.

Communities can be considered in terms of the actions they take and the way they interact. Taking a broader stance in defining communities, they can be conceptualised using three distinct contributing factors: geography, interaction and identity (Delannon, et al., 2016). Here, geography relates to the physical proximity between members of the communities, their degree of interaction, and on what basis these members communicate with each other, while identity refers to the members' sense of belonging to the community. By this definition, communities can be described both as local, or communities of place, and as social networks, or communities of interest (Calvano, 2008; Dunham et al., 2006). This distinction between two forms of community has consequences for our understanding of the mechanisms guiding community risk management, as both their actions (practice) and their individual characteristics have an impact on their ability to expose MNEs to risk.

Communities of place (CofP) are groups of people who live together in the same geographical environment and thus share the same economic, educational, religious and cultural institutions (Calvano, 2008). While the term can be understood in a broader sense, it is in this paper defined as the towns and villages that are affected by MNE activities. Interaction between CofP members is based on their mutual interest and centred on the challenges and opportunities that arise from these activities within this confined area. Members communicate changes to the geography which will impact members of the community of place democratically, as they, with little variance, will experience the same impact in the community (Beck, 1992). Members of the community identify with the place where they live, including the history and culture that in some cases has developed over decades.

Communities of interest (CofI) are advocate groups that come together because they share certain common beliefs or characteristics. They are not constrained, like a CofP, by their geographical proximity or because of their day-to-day interactions, but by an identity related to a certain cause. Their views focus on one or more of the social changes, economic impacts or environmental consequences occurring because of a mining project or linked to their political beliefs about mining in general. A CofI is in this way not embedded in the cultural and social life of local communities, but is bound together because of opinions about the impact of mining and the willingness to act on their beliefs. There can also be an overlap and direct interaction between CofP and CofI on both an individual and an organisational level, as members of a village or town, for example, become engaged in environmental or social causes, or when a CofI engages in different form of activity within the CofP. By making this distinction between two

types of community, it is possible to get conceptually closer to what is meant by communities and the unique characteristics that the different forms can take.

3.3.2 Conceptualising risk

There is no uniform definition of risk within sociology, but the concept originates in the field of management, with its roots in industrialisation and modernity (Arnoldi, 2009; Lupton, 1999). Originating from practice and the halls of the executive suite, the conceptual form of risk had a hard time finding its ontological and epistemological platform; however, most agree that risk, and not least risk management, is an important part of how we understand society, organisations and businesses, and a significant proportion of organisational resources are devoted to measuring, analysing and mitigating risks (Parker, 2005:468ff; Renn, 2008:173ff). With industrialisation in the nineteenth century and the rise of modernity, an understanding of risk emerged in terms of a linear progression of possibly threatening events that could be turned into objects of measurement (Bernstein, 1996), focusing on the potential for loss of value (tangible or intangible) and how organisations could improve their structures and systems with the aim of avoiding the realisation of these losses (Beck, 1992:26; Beck, 2007:213). This suggests that it is possible to comprehend risk in much the same way as wealth distribution can be explained, as being subject to the forces of production and consumption, weighing risks and opportunities against each other. This perspective has its limits in an ever more globalised business environment, however, where complexity is increasing, as is the number of involved and salient actors. Here, each actor takes seemingly rational actions given the information available to them and the boundaries of the institutions that limit their behaviour, which from the outside observer's perspective seem to lack rationality and inherent meaning. This presents an ontological challenge between the objective and subjective perspective, questioning the relationship between our understanding of reality as existing independently of the observer or as being constructed through experiences and so through the creation of meaning. From a risk management perspective, the difference is between whether risks are observable events that can be quantified and therefore are objectively identifiable in nature, or whether these risks are socially constructed by the individual. This realisation has prompted researchers to concentrate on how people perceive and create meaning about events in their environment, rather than focusing on the risk events themselves (Gephart, et al., 2009; Miller, 2009).

The postmodern perspective presents a conceptualisation that focuses on the perception of risk rather the risk event itself (Beck, 1992; Giddens, 1990:46). Risks are no longer seen as

objectively identifiable or fixed entities with distinct social or technological features, but rather as a new way of imagining how decisions affect individuals and their surroundings. This expanded notion of risk as a complex system providing stakeholders with different representations of what is real has several implications. The first is that the management of risk can be described as an instrument for framing objects with the purpose of action and intervention by decision-makers (Weick, 2001). This perspective provides a new and much more social understanding of how risk is created and interpreted by stakeholders.

This form of 'risk management' thinking also means that we no longer exclusively regard risk as something organisations and individuals are exposed to from their external environment, but also something they produce themselves (Power, 1997, 2004a). This perspective does not exclude the idea that hazards and danger are real and are something that organisations need to deal with, but it rejects the idea that mitigation can happen through technology systems alone. This insight has given rise to Michael Power's (2004a:64) adaptive approach to risk management "that is not control obsessed and which has a second order capacity to observe and challenge the effects of the internal control system itself". It draws on Luhmann's (1993) notion that risk management, in essence, is a human activity of decision-making about the future with the purpose of transforming danger (or uncertainty) into the domain of responsibility and making it subject to observation. Bridging the two ontological reality claims, the objective and subjective, makes it possible for the observer to take on risk mitigation responsibilities in an effort to understand and possibly interfere in the creation of meaning. This understanding leads to the perspective that different groups envision risks and interpret what is happening in their surroundings on an individual basis, grounded in the creation of meaning rather than as objectively identifiable events (Gephart, et al., 2009; Green, 2009), and that decision-makers perceive the character of risk as being an uncertain yet uncontrollable feature which must be managed after the fact, even as attempts to prevent its realisation are implemented through planning and organising.

Karl Weick (2001) was one of the first to recognise that, to determine if something in our environment is real, it has to make sense to us and be influenced not only by ourselves but also the social and physical environment, and that meaning, too, was not created in a vacuum but composed through interaction with the individuals and groups with whom we associate in what can be characterised as distributed sensemaking (Weick, 2005). The process of creating meaning, or sensemaking, is the "the ongoing retrospective development of plausible images that rationalise what people are doing" (Weick, et al., 2005:409), which is what people go

through to determine the realness of the world around them. Sensemaking involves seven elements, each of which contributes to our creation of meaning (Weick, 2012:129ff). It depends on who we are, or our identity, as we perceive it in our social context, and on both the information that is available to us at a given time and the retrospective knowledge that we have about how the world functions. Thirdly, because we are partly constructing the environment around us through attributing meaning, it depends on the enactment part of how we make sense of things, including determining whether something constitutes a threat or an opportunity. Fourthly, it depends on how the social environment reacts and possibly corrects our perception of our constructed environment. Fifthly, sensemaking is an ongoing process and, as we become more knowledgeable about what is going on in our environment, we build upon those decisions that have proved successful in the past, improving our ability to handle uncertainties in the social environment as they arise. We also extract cues from our environment that either enforce or hinder certain conclusions from becoming salient. Finally, we base our perception of what makes sense on whether the 'image' we have created seems plausible. We collect fragments of information and cues from our surroundings to fill in the missing pieces, with experience and rational thinking, thereby determining what makes sense in the world.

3.3.3 Community risk

Community risk is the result of discrepancies between the beliefs, values and attitudes of community members formed by the process of sensemaking and the actions reflected in current business practices (Gifford & Kestler, 2008; Graetz & Franks, 2015; Gruev-Vintila & Rouquette, 2007). Based on this process, there is a chance that members of the community will take action that affects a company's ability to operate, in the form of disrupting operations directly through demonstrations, strikes or other disruptive measures. For example, the perceived level of pollution from a company can be of grave concern to community members, causing them to demonstrate or engage in rioting, but the same pollution level can be perceived by the firm as within acceptable levels and therefore not a risk. The concept of community risk is linked in the business literature to the difficulties of predicting the likelihood of collective action by community members, and the direction that such action might take when faced with discrepancies between the community's values and those embodied in the institutions impacting their lives (Graetz & Franks, 2015; McGill & Siu, 2010; Miller, 1992). There are two forms of community risk. One originates from CofI, whose values and norms are focused on primarily the positive or negative consequences of risks; the other derives from CofP, which evaluates

both the positive and negative effects of being exposed to corporate activities. Community risk is thus based on the sensemaking process of community members who, based on beliefs and experiences, evaluate an event as either a risk or an opportunity.

Differentiating between risks from CofI or CofP is thus based on how these two groups make sense of events in their social and physical environment. The clues communities use to identify risks are based on their values, beliefs and attitudes towards the world around them, as the two groups evaluate events based on their beliefs, values and attitudes about the changes that they are experiencing.

3.4 Multinationals and community risk

MNEs are exposed to higher costs and thereby endure potential risks when they enter into geographical, cultural and social contexts outside their home country. The risks associated with their lack of knowledge and being an outsider to the cultural context they are entering in are what is called 'liability of outsidership' (Johanson & Vahlne, 2009:1411), being unique to the MNE, as compared to local companies they have little or no experience operating in a particular national context. Three types of risk are salient to the MNE compared to other companies, namely financial, political and cultural risks (Ghoshal, 1987; 2000; Tasavori, et al., 2014). Financial risks are made up of possible threats that can affect the economic situation, such as exchange, commodity price and equity risks, or having difficulty gaining access to capital (Hagig & Sivakumar, 2009; Jorion, 1996; Miller, 1992). Communities can affect financial risks by creating uncertainty surrounding the MNE's ability to live up to its financial commitments, such as its capacity to pay off loans or deliver products that are already paid for on time. Political risks entail the arbitrary consequences arising from political events that affect an organisation's ability to operate (Butler & Joaquin, 1998; Lou, 2009; Miller, 1992; Simon, 1984). These include non-market events, economic and social changes that might occur because of decisions made by political institutions. Political risk encompasses a broad range of politically motivated actions, including changes in economic policies and debt restructuring resulting in changes to the economic infrastructure, and expropriation of land and private enterprises. When communities expose MNEs to these types of risk, it is in the form of demonstrations, politically motivated vandalism or small scale terrorist attacks. Finally, cultural risks include changes occurring to institutions, as well as social and cultural variations between MNE management and the host country context (Feinberg & Gupta, 2009; Lodh & Nandy, 2008; Lou, 2009). While there are widespread disagreements about what factors to include as

cultural risks, they are linked to the national context and the risk associated with the cultural differences between host and home country in norms and values. These differences can give rise to conflicts in perceptions of agreements and the way negotiations should be conducted, leading to a breakdown in communication and ultimately in the mining MNE's loss of its social licence to operate (Graetz & Franks, 2015; Prno & Slocombe, 2014). Communities are in this sense seen as smaller units of a large-scale national population that share common characteristics when it comes to power distance, individualism, masculinity, uncertainty avoidance and long-term orientation.

Community risk arises when communities perceive MNE activities as being in opposition to the aspirations and aims of the community and so take actions that can threaten business continuity, depending on the resources the community has available (Hagigi & Sivakumar, 2009; Lessard & Lucea, 2009; Makhija & Stewart, 2002). CofP will make sense of the mining MNE's activities on the basis of evaluating both the benefits and the downsides of having a mine within their geographical area (Franks et al., 2014; Kemp, et al., 2016). Benefits can be the prospect of jobs being created, improvements in the socio-economic development of the community, investments in infrastructure, etc., while drawbacks can be in the form of changes to the environment, pollution, community cohesion, illness and so on. As outlined by Weick (2005), the community will base its decisions about the mining project on its previous experiences, if not with mining, then with events that they at some point have been subjected to, along with input from the company on how the project unfolds, the investments and promises they make, and the opinions of experts, government officials and CofI who have a stake in the project. Based on this input, they will extract cues that indicate how plausible it is that events will unfold in a certain way, leading to a decision on whether the CofP supports or opposes the project. As sensemaking is an ongoing process, the CofP can change or alter its perception of the project as more cues are added that will change how plausible alternative interpretations are. The CofI will provide input to the CofP by committing its organisational resources that either support or oppose the mining project. These communities have a clear idea on what the impact of a given project will be on the community before entering the process and will try to persuade the CofP that there are cues that indicate how a given project will unfold—for example, by drawing on how communities in other places have been impacted, leading to negative or positive social and physical changes.

Table 5 summarises the review of the MNE risk management literature and the potential that community risks have for exposing companies to financial, political and cultural risks in the light of risk as distributed sensemaking.

Table 5. Community risks

	Community risks
Financial risk	Arises when communities make sense and take decisions to commit resources against the company that lead to the threat of financial loss.
Political risk	Arises when communities make sense and take decisions that engender the involvement of political actors that can influence licensing or ownership structures.
Cultural risk	Arises when communities make sense and take decisions to commit resources which can revoke the social licence to operate.

3.5 Method

To examine the community risk mechanisms guiding relations between CofP, CofI and the MNE, I draw on two cases examples from the Armenian mining industry. The papers uses an inductive approach starting taking its outset in the two cases, which are used to develop a theoretical framework that can describe the relationship between the three actors in a risk perspective. The mining sector in Armenia and the MNEs operating there provide a perfect avenue for studying the risks associated with both types of community. Mining activities in the country are often conducted in proximity to villages and towns, which makes the impact of the mine especially salient for the CofP members. The case of Vallex Mining, a Cyprus-based mining MNE, is a good illustration of how political, financial and cultural risks relate to both types of community and the risk management practices that the MNE deploys. There are several civil society groups (CofI) who engage the mining MNEs in regard to their social and environmental impact, on both a local and a national scale. The case examples were compiled through a series of 14 semi-structured interviews with key stakeholders from Vallex Mining and local communities in the nearby villages of Teghut and Shnogh as representatives of the CofP, as well as interviews with the national NGOs, Save Teghut and the Pan-Armenian Environmental Front, representing CofI. The interviews were supplemented by site observations

at the two villages and two visits to the Vallex mine itself. Interviews were conducted using the same interview guide, which focused on uncovering the change events caused by the mine to which the two CofPs and CofIs are related, as well as their perception of these changes as risks or opportunities. The transcripts of the interviews were subsequently thematically coded (Flick, 2009), with the aim of differentiating between the CofP and CofI perceptions of the same events and identifying underlying mechanisms (Archer et al., 1998:82) that guided risk management decisions by MNE management.

3.6 Two cases about the mitigation of community risk

A concrete example of management of community risks can be seen at the Vallex Group's (Vallex) copper-molybdenum mine in north-eastern Armenia. For decades, it was known that there was copper in the mountains surrounding the villages of Teghut and Shnogh, and a survey confirmed this as part of a national effort to map all mineral sites in Armenia (Mining Journal, 2011). The relatively easy access to the minerals and a positive government attitude towards foreign direct investments made the project attractive to the MNE. Construction of the mine started in 2010 and was completed in 2014, when the mine went into production.

3.6.1 Case: Raising dust

In April 2012, it was claimed that residents of Teghut were beaten up by corporate security staff because they had raised dust by careless driving, something the local villagers claimed the company did all the time. The incident escalated further as villagers blockaded the road to the mine, meaning that employees, usually transported to the site by bus, could not get to work. The protesters wanted the local mayor and regional governor to intervene and ensure that 'local justice' was done: "It is not enough that they [Vallex] keep us in [mining] dust the whole time, and we do not say anything. Yet one good lad accidentally raised dust, and they caught our villagers and beat them in the centre of the village." (Interview Teghut, 2014) The event escalated into a blockade. "Since early morning (7:00 am) residents of Teghut blocked the road and the workers, who come from nearby villages to work there, could not manage to enter the territory." (Ibid)

The villagers called for intervention from the regional and national politicians. The mayor of Teghut recalled the incident as "Vallex implemented rude power and enforced the local villagers to settle the demonstration." (Interview Teghut, 2014). Both the local and national press reported on the incident under the headline "Teghut mine security beat up local

villages: Residents block road in protest” (Hetq, 2012) but did not beyond explicitly side with either of the two parties in the conflict. The Vallex reaction was at first to communicate that they regarded the incident as an internal matter and that it was the security staff that were assaulted by community members: “The illegal action has been stopped jointly by the forces of the police and the employees of Vallex”. (Interview Vallex, 2014). This created a distinct gap in the interpretation of events at the mine between the CofP members (Teghut) and the Vallex representatives (mining MNE).

This incident can be characterised as a community risk, as there were demonstrations and some degree of social unrest took place which affected business continuity. It was a CofP risk event, as the actors were geographically situated close to the mines, and because they had grievances that they cared enough about to involve other more influential stakeholders such as politicians, police and the press. The incident had the potential to escalate into political risk and was framed as political in the sense that it called for political intervention. CofP members were in this way trying to change the central issue from an incident between residents of the village and Vallex guards to a matter involving regional policymakers and Vallex management. The corporate response was to place the event in an institutional setting that could be managed within its already existing governance system, stating in a press release that “We, Vallex, call on all interested parties before the end of operations carried out by law enforcement agencies, to reveal the possible culprits of the incident and take the responsibility to refrain from groundless and fabricated statements” (Hetq, 2012), thereby transferring the event from an issue involving the grievance of CofP members to an institutional setting that it was better equipped to handle.

Returning to the village at a later date, the village head was asked to recall any incidents, and he responded: "In general there are no disputes between the village head and the mining company and discussions are based on collaborative discussions" (Interview Teghut, 2014). Another village, Shnogh, around six kilometres from the mine, described the community reaction and the resolution of their issues with the mining company in a slightly different way: "Twice the villagers were against the mine. There have strong community coherence and on these two occasions the villagers closed the road. Any violence was done by the people of the company [Vallex]. The region head came with the police, and they discussed the issue with the firm, creating a solution that they found satisfactory" (Interview Shnogh, 2015). The possible risk event was satisfactorily closed by the village representative and the issue did not escalate further into a political issue, which was the initial intention of the villagers. Further evidence of de-escalation was found as local and regional politicians did not involve themselves in the

incident, opting to ask the villagers to "follow the company decision to resolve the dispute" (Interview Teghut, 2015), which they eventually did. The case could finally be dismissed by the local police as a matter of false rumour and misunderstanding instigated by the local residents and an issue between Vallex and its employees, which should be handled by the human resource department.

3.6.2 Case: Taking care of the forest

Another incident involved community concerns over deforestation and was linked to the preservation of the remaining forests in Armenia. This incident escalated further than the first case and highlighted the importance of early risk detection and prevention. Here, preventive measures seemed to be focused on drawing attention to the initiatives already implemented, as well as a clarification of the MNE's intentions. When some of these initiatives did not adequately mitigate the community risk, the MNE allied itself with a prominent political figure that legitimised the mitigation initiatives implemented, thereby effectively closing the case from public scrutiny.

The forests of Armenia are regarded as cultural artefacts that can be traced back to the dissolution of the Soviet Union and the war in the region of Nagorno-Karabagh (Moreno-Sanchez, et al., 2007). Both of these historical events resulted in a prolonged energy crisis where most of the existing forests were cut down for firewood. Since then, there has been broad popular support for reforestation and forests are regarded as signifying the healing of the country.

As part of the initial stages of constructing the mine in Teghut, the local forest, all-in-all around 600 hectares, had to be cleared. Even in the original planning phase, debates were initiated by local and national environmental CofIs about whether the mine should be explored at all. Arguing that "The locals were using the forests collecting barriers, wood etc. this can't be done now. There are pollutions in terms of tailing dam collapse as it happened earlier at Teghut. It is a 5 already. They can't go to the forest anymore." (Interview Save Teghut, 2016). As the Teghut area was a known copper deposit since before the collapse of the former Soviet Union, it was difficult for some to understand why it should be exploited at this time, when there were already other copper mines operating (Teghut, 2015). There were also several environmental CofIs who not only opposed deforestation but mining in general, and who identified an opportunity to use the specific case to highlight many of the cultural and political issues that were haunting Armenian society. This created a business environment where there was, from

the outset, strong opposition to the project from both the local communities affected, as well as the critical CofI community. It presented a challenge for the MNE to mitigate the cultural risks associated with clearing forests for the mining site and thereby maintain its social licence to operate. Reforestation therefore became a high priority issue, as the company needed to build trust with the local communities and maintain good relations with government officials, environmentalist groups, politicians and other interested stakeholders. The mitigation efforts implemented focused on a programme involving several different groups in the process of replanting the lost trees cut down to make room for the project. The programme included the participation of students from local villages and other parts of the country, as well as national and regional youth organisations. The project had the aim not only of planting trees around the mining site but also in other places in Armenia, and involved student study trips to cultural and historical sites around the country.

All of these efforts were highly publicised on the company web site and extensively covered by the media. The efforts culminated in a visit from the Armenian President, Serzh Sargsyan, who stated that the company "...assured that in the context of the exploitation of [the] copper-molybdenum mine it was more important from the ecological perspective to compensate the damage to be done to the forest reserve. As a consequence, the company has worked on a reforestation project" (Vallex, 2016). A few critical CofIs tried to raise a court case but were unsuccessful, as all their claims of misconduct by the company were dismissed by the Armenian court as unfounded, effectively closing the case in the legal system (Judgment EKODAR, 2010). This left CofIs like the environmental and human rights NGO Save Teghut believing that "The company has a lot of power so they can do whatever they can do whatever they want" (Teghut, 2015). To date, local and regional NGOs continue to make claims against the project, contending that the reporting and apparent transparency is falsified, misleading the CofP in Teghut and Shnogh: "They are digging somewhere else; it is not the same site as on their licence. They dig the entire territory and even more than they were supposed to. They cut down the forest where the provision over 25 years ago was to cut proportions of the forest, but they are cutting more." (Interview Teghut, 2016).

As the possibility of addressing the concerns of local stakeholders through the Armenian court system yielded no results, other avenues are being explored, among them the UN Court of Human Rights. The response has been that local and national CofIs have mobilised to confront institutional investors who have invested around 50 million euros in the project, and described their involvement: "We're naturally delighted to be able to enter into this agreement, which will

increase Danish exports, and, what is more, for a project that is setting new standards for mining in Armenia. We have imposed a number of requirements, which will mean that the mine will be the first in Armenia to satisfy the international standards” (PensionDanmark, 2013). This statement indicated that the grievances of the CofP and NGO (CofI) did not alter investor commitment to fund the project, in effect closing all the avenues for the local communities and NGOs to escalate the issues of deforestation to stakeholders who could intervene in the operation of the mine. When interviewing local villagers, it did not seem to be a major concern, as there had been "a small negative impact [...] registered on forests, most specifically, the areas of forests decreased" (Interview Teghut, 2015) and the focus was on other issues such as water access and the day-to-day activities of the mining operations as more salient problems for the CofP.

The process that community members go through to ascribe meaning can be understood through two sociological perspectives, sensemaking and framing (Wegner, 1998:53; Weick et al., 2005). In order to understand the risks that are presented to us from the world around us, we make use of frames or ‘reference maps’ from which we can understand the context we are part of and the way we construct frames through the process of sensemaking. Their purpose is twofold. Firstly, they help us organise experiences, enabling people to recognise what is happening and providing barriers (frames) so that we can distinguish between uncertainty (unknown) and risk (known). Secondly, they offer a historical account of past decisions (past frames) that we can draw upon when making new decisions or deciding an appropriate behavioural response to new information. Sensemaking involves the creation of meaning and how individuals make sense of the world around them, enabling them to take some form of action. It involves a process through which, after noticing something is different but somehow recognisable, we find a plausible explanation, classify the anomaly and search our experience of how similar events have been handled by ourselves or others. We subsequently assign some form of action or cure to the event that we believe will resolve the issue, and finally take action.

The two Armenian cases illustrate how the MNE actively tries to influence the sensemaking process of key stakeholders to prevent community risk issues escalating into political or cultural risks. In the first case, the incident of violence at Teghut, the stakeholders created meaning that led them to conclude that the employees of the MNE were not respecting the villagers, and that this particular incident was the latest example of the misbehaviour of employees at the mine. The incident can be characterised as community risk as, through sensemaking, the villagers were making sense of the action of the MNE, which resulted in them

taking actions that constituted a risk that affected organisational value-creating activities. The community members made an effort to escalate the incident to the political level by getting the attention of more powerful stakeholders, in this case the press and local/regional politicians. The response from the company was to frame the MNE employees as victims, but as this does not de-escalate the situation immediately, they pursued another strategy by referring to an internal investigation, convincing the local government officials that there was no reason to get involved, and the situation de-escalated.

The second case, in which the MNE was involved in tree planting, highlights the importance of local (tacit) knowledge. Understanding that the locus of the potential crisis was centred on respect for the Armenian cultural heritage (in this case the local forest) and that the project would involve significant deforestation, the MNE mobilised an effective response. It involved the local population in the reforestation efforts, and later on regional and national stakeholders, as part of its efforts to legitimise the project on a national level (Teghut, 2015). This initiative created an opportunity to use the community risk of being a company that destroys cultural heritage as a way to shield the MNE from attacks from NGOs and government interference. The response strategy follows a pattern where the organisation knowingly places nature at risk as part of the mine construction, but the event turned into an opportunity by utilising the grievances as a way to create a successful Corporate Social Responsibility (CSR) campaign.

3.7 Conclusion and contribution

This paper has investigated what community risk is and analysed how mining MNEs in Armenia are managing risks originating from communities and the effect of their risk management efforts. The paper contributes by arguing that a sociological approach to these types of risk would provide MNEs with a superior explanatory framework, rather than traditional risk management tools, and would allow companies early detection of warning signs about community grievances that could escalate into less manageable and more resource-intensive political and cultural risks. Community risk is defined as the results of the sensemaking processes of CofP and CofI that lead to the commitment of resources that constitute a risk (financial, political or cultural) which has the potential to influence organisational value-creating activities. The paper draws on two examples where communities represented a threat to continued operations and how mining MNEs in Armenia, through an intervention in the meaning creation process, were able to avoid an increase in community risks

and thereby in the commitment of organisational resources by CofP and CofI. This illustrates that efficient management of community risks depends on an MNE risk manager's competencies in understanding and analysing the process of meaning creation and intervening in this process by committing his organisational resources.

The distinction between CofP and CofI when it comes to community risk is important, because of the differences in their perspective on the mining MNE, as a threat or an opportunity, and the resources that the two communities have available to them to actually influence the mining MNE. As shown, the CofP evaluates both the benefits and drawbacks of a given mining project when creating meaning and the action it will take to either exploit or mitigate these; however, the CofP, as conceptualised here as a community geographically placed near the mining operation, has fewer resources and less knowledge about how to influence the mining MNE's decisions. As illustrated by the two examples from Armenia, it is necessary for the CofP to elicit support from CofIs that have organisational resources and knowhow on how to apply pressure to the mining MNE that can change its behaviour. Community risk exposure depends on the resources that communities have available, which can be used to mobilise important political, financial or cultural agents that can pose a risk to business continuity. Community risk is thus as much related to the specific situation and how meaning is created as it is to the ability to get the involvement of actors who have the necessary resources to pose a threat to the mining MNE.

3.8 References

- Archer, M., Bhaskar, R., Collier, A., Lawson, T., & Norrie, A.(1998). *Critical realism: Essential readings*. London: Routledge.
- Arnoldi, J.(2009). *Risk: An introduction*. Cambridge: Polity Press.
- Beck, U.(1992). *Risk society*. Los Angeles, CA: Sage.
- Beck, U.(2007). *World at risk*. Malden, MA: Polity Press.
- Bekefi, T., Jenkins, B., & Kytile, B.(2006). *Social risk as strategic management*. Working paper no. 30. Cambridge, MA: John F. Kennedy School of Government, Harvard University.
- Bernstein, P.L.(1996). *Against the gods: The remarkable story of risk*. New York, NY: John Wiley and Sons.
- Business for Social Responsibility (BSR).(2003). *The social license to operate*. Retrieved from: http://www.sds.org/wp-content/uploads/2013/04/file_BSR_Social_License_to_Operate.pdf
- Butler, K.C., & Joaquin, D.C.(1998). A note on political risk and the required return on foreign direct investment. *Journal of International Business Studies*, 29(3):599–607.
- Calvano, L.(2008). Multinational corporations and local communities: A critical analysis of conflict. *Journal of Business Ethics*, 82:793–805.
- Delannon, N., Raufflet, E., & Baba, S.(2016). Corporate community engagement strategies and organisational arrangements: A multiple case study in Canada. *Journal of Cleaner Production*, 129:714–623.
- Dunham, L., Freeman, R.E., & Liedtka, J.(2006). Enhancing stakeholder practice: A particularized exploration of community. *Business Ethics Quarterly*, 16(1):23–42.
- Ecolur.(2015). Interview with Inga Zarafyan. Retrieved from: <http://www.ecolur.org/>
- Feinberg, S.E., & Gupta, A.K.(2009). MNC subsidiaries and country risk: Internalisation as a safeguard against weak external institutions. *Academy of Management Journal*, 52(2):381–399.
- Flick, U.(2009). *An introduction to qualitative methods*. (4th edition). London: Sage Publications.
- Franks, D.M., & Cohen, T.(2012). Social license in design: Constructive technology assessment within a mineral research and development institution. *Technology Forecasting and Social Change*, 79:1229–1240.
- Franks, D.M., Davis, R., Bebbington, A.J., Ali, S.H., Kemp, D., & Scurrah, M.(2014). Conflict translate environmental and social risk into business costs. *PNAS*, 111(21):7576–7581.

- Freeman, E.R.(1984). *Strategic management: A stakeholder approach*. Boston, MA: Pitman.
- Gao, S.S., & Xhang, J.J.(2006). Stakeholder engagement, social auditing and corporate sustainability. *Business Process Management Journal*, 12(6):722–740.
- Gephart, R.P., Van Maanen, J., & Oberlechner, T.(2009). Organizations and risk in late modernity. *Organization Studies*, 30(02/03):141–155.
- Ghoshal, S.(1987). Global strategy: An organizing framework. *Strategic Management Journal*, 8:425–440.
- Giddens, A.(1990). *The consequences of modernity*. Cambridge: Polity Press.
- Gifford, B., & Kestler, A.(2008). Towards a theory of local legitimacy by MNEs in developing nations: Newmont mining and health sustainable development in Peru. *Journal of International Management*, 14:340–352.
- Graetz, G., & Franks, D.M.(2015). Conceptualising social risk and business risk associated with private sector development projects. *Journal of Risk Research*, 19(5), 581–607.
- Green, J.(2009). Is it time for the sociology of health to abandon ‘risk’? *Health, Risk & Society*, 11(6):493–508.
- Gruev-Vintila, A., & Rouquette, M-L.(2007). Social thinking about collective risk: How do risk-related practice and personal involvement impact its social representations? *Journal of Risk Research*, 10(4):444–581.
- Hagigi, M., & Sivakumar, K.(2009). Managing diverse risks: An integrated framework. *Journal of International Management*, 15:286–295.
- Hetq, (2012). Teghout Mine Security Beat Up Local Villagers: Resident Block Road in Protest, 17 April 2012 (retrieved 15/08/2014)
- Holzmann, R., Sherburne-Benz, L., & Tesluic, E.(2003). *Social risk management: The World Bank approach to social protection in a globalizing world*. Retrieved from: [http://site/resources.worldbank.org/SOCIALPROTECTION/Publications/20847129/SRMWBApproachtoSP.pdf](http://site.resources.worldbank.org/SOCIALPROTECTION/Publications/20847129/SRMWBApproachtoSP.pdf)
- International Council of Mining and Metals (ICMM).(2015). *Indigenous people and mining*. (2nd edition). London:ICMM
- International Finance Corporation (IFC).(2015). *The EITI standard*. Washington DC: World Bank Group.
- Johanson, J., & Vahlne, J. E.(2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40:1411–1431.

- Jorion, P.(1996). *Value at risk*. New York, NY: McGraw-Hill.
- Judgment EKODAR.(2010). *Court judgment between NGO Ecodar and the Government of Armenia*. Administrative case number VD/3275/05/09. Retrieved from: http://www.unece.org/fileadmin/DAM/env/pp/compliance/C2011-62/Correspondence_with_the_communicant/Decision_of_the_Admin_Court_24.03.2010_eng.pdf
- Kemp, D., & Owen, J.R.(2013). Community relations and mining: Core to business not ‘core business’. *Resource Policy*, 38:523–531.
- Kemp, D., Worden, S., & Owen, J.R.(2016). Differentiated social risk: Rebound dynamics and sustainability performance in mining. *Resource Policy*, 50:19–26.
- Kot, S., & Dragon, P.(2015). Business risk management in international corporations. *Procedia Economics and Finance*, 27:102–10.
- Kytle, B., & Ruggie, J.G.(2005). *Corporate social responsibility as risk management*. Harvard University Corporate Social Responsibility Initiative, Working Paper no.10.
- Labonne, B.(1999). The mining industry and the community: Joining forces for sustainable social development. *Natural Resource Forum*, 23:315–322.
- Lessard, D., & Lucea, R.(2009). Embracing risk as a core competence: The case of CEMEX. *Journal of International Management*, 15:296–305.
- Lodh, S., & Nandy, M.(2008). Exploring country risk: MNCs’ mindset. *The ICAFI Journal of International Business*, 3(2):24–35.
- Lou, Y.(2009). Political risk and country risk in international business: Concepts and measures. In: *Oxford handbook of international business edited by Rugman, A.M.* (2nd edition). (page 741-760) Oxford: Oxford University Press.
- Luhmann, N.(1993). *Risk: A sociological theory*. New York, NY: Transaction Publishers.
- Lupton, D.(1999). *Risk*. London: Routledge.
- Makhija, M.V., & Stewart, A.C.(2002). The effect of national context on perception of risk: A comparison of planned versus free-market managers. *Journal of International Business Studies*, 33(4), 737–756.
- McGill, S.M., & Siu, Y.L. (2010). The nature of risk. *Journal of Risk Research*, 7(3):315–352.
- McKinnon, R.(2010). Social risk management and the World Bank: Resetting the ‘standards’ for social security? *Journal of Risk Management*, 7(3):297–314.
- Meyer, J.W., & Rowan, B.(1977). Institutionalized organisations: Formal structures as myth and ceremony. *American Journal of Sociology*, 83(2):340–363.

- Miller, K.D.(1992). A framework for integrated risk management in international business. *Journal of International Business Studies*, 23(2):311–331.
- Miller, K.D.(2009). Organizational risk after modernism. *Organizational Studies*, 30(2–3):157–180.
- Mining Journal.(2011). *Armenia mining journal*. UK: Aspermount.
- Moreno-Sanchez, R., Sayadyan, H., Streeter, R., & Rozelle, J.(2007). The Armenian forests: Threats to conservation and needs for sustainable management. *Ecosystems and Sustainable Development IV*, 106:113–122.
- North, D. C.(1990). *Institutions, instructional change and economic performance*. Cambridge: Cambridge University Press.
- Owen, J.R., & Kemp, D.(2012). Social license and mining: A critical perspective. *Resource Policy*, 38:29–35.
- Parker, B.(2005). *Introduction to globalisation and business*. London: Sage.
- PensionDanmark.(2013). *EKF and PensionDenmark secure financing of large orders for FLSmidth*. Retrieved from: <https://www.pension.dk/en/english/About-PensionDenmark/News/PD-news/EKF-and-PensionDenmark-secure-financing-of-large-orders-for-FLSmidth/>
- Petersen, B., Pedersen, T., & and Lyles, M.A.(2008). Closing knowledge gaps in foreign markets. *Journal of International Business Studies*, 39(7):1097–1113.
- Power, M.(1997). *The audit society*. London: Oxford University Press.
- Power, M.(2004a). Counting, control and calculation: Reflections on measuring and management. *Human Relations*, 57:765–783.
- Power, M.(2004b). The risk management of everything. *Balance Sheet*, 12(5):19–28.
- Prno, J., & Slocombe, S.(2014). A systems-based conceptual framework for assessing the determinants of a social license to operate in the mining industry. *Environmental Management*, 53:672–689.
- Renn, O.(2008). *Risk governance*. London, Earthscan.
- Schein, H. E.(2004). *Organizational culture and leadership*. (3rd edition). Los Angeles, CA: John Wiley and Sons.
- Shrader, R.C., Oviatt, B.M., & McDougall, P.P.(2000). How new ventures exploit trade-offs among international risk factors: Lessons for the accelerated internationalization of the 21st century. *The Academy of Management Journal*, 43(6):1227–1247.

- Simon, J.D.(1984). A theoretical perspective on political risk. *Journal of International Business Studies*, 15(3):123–143.
- Tasavori, M., Ghauri, P., & Zaefarian, R.(2014). The entry of multinational companies to be base of the pyramid: A network perspective. In: Temouri, Y., & Jones, C. (Eds.), *International business and institutions after the crisis*. New York, NY: Palgrave Macmillan.
- Teghut.(2015). *Save Teghut initiative*. Retrieved from: <http://teghut.am/en/>
- Vallex.(2016). Vallex group news. Retrived from www.vallexgroup.am/en/Information-Center-News-Archive
- Vergne, J-P.(2011). Towards a new measure of organisational legitimacy: Method, validation, and illustration. *Organisational Research Methods*, 14(3):484–502.
- Warnaars, X.S.(2012). Why be poor when we can be rich? Constructing responsible mining in El Panguí, Ecuador. *Resources Policy*, 37(2):223–232.
- Wegner, E.(1998). *Communities of practice: Learning, meaning, and identity*. Cambridge:Cambridge University Press.
- Weick, K.E.(2001). *Making sense of organization*. Oxford: Blackwell.
- Weick, K.E.(2005). Managing the unexpected: Complexity as distributed sensemaking. In: McDaniel Jr., R.R., & Driebe, D.J. (Eds.), *Uncertainty and surprise in complex systems: Questions on working with the unexpected* (pp. 51–65). Berlin: SpringerVerlag.
- Weick, K.E., Sutcliffe, K.M., & Obstfeld, D.(2005). Organizing and the process of sensemaking. *Organization Science*, 16(4):409–421.
- Weick, K.E.(2012). *Making sense of the organization*. Volume 2: The impermanent organization. London: Wiley
- Weiner, B.(1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4):548–573.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2), 341–363.

4 MNE risk management of community risk: Experiences from Armenia

Jacob Taarup-Esbensen, Copenhagen Business School and Zealand Institute of Business and Technology

4.1 Abstract

This paper analyses the management of communities of place from a multinational enterprise (MNE) risk management perspective. The paper proposes that a legitimacy-based view (LBV) can be used when managing these localised risks from communities of place (CofP), communities that are located geographically close to the mining operations. The analysis revealed two gaps in the current MNE risk management literature namely its distinct focus on regional or national level financial, political and cultural and country risks and a lack of attention given to an increasingly salient CofPs that has gained the ability to influence business continuity either directly or by partnering critical stakeholders. The paper contributes to the MNE risk management literature in three ways, firstly, by showing how mining companies mitigate risks associated with CofP by investing in community development for example in infrastructure or educational facilities. Secondly, that these activities are managed under a CSR governance system where they reduce possible financial, political and cultural risk from a wider stakeholder group. And finally, that building trust with both CofP, investors and political actors reduce the risk that critical stakeholders interfere in the mining MNEs operations.

Keywords: legitimacy-based view, risk management, mining multinational, communities

4.2 Introduction

The ability to assess risk efficiently is a central part of every multinational enterprise (MNE) when it plans to invest and operate in regions outside its home country (Ghoshal, 1987). With globalisation, which has increased the speed and volume of information as well as the number of stakeholders, the need to rethink risk management has become more salient. Risk management has become an increasingly complicated task and entails significant challenges that are unique to the MNE as a global actor. The increased complexity is especially important when investigating uncertainty originating from local communities or communities of place (CofP) in the areas where they operate (Calvano, 2008). In this interconnected world, CofPs, which have increasingly gained access to mass communication tools, present MNEs with new elements of uncertainty and unpredictability that are outside the scope of traditional risk management tools (BSR, 2003; ICMM, 2015). In this context, effective risk management and corporate success are increasingly reliant upon risk managers' ability to efficiently assess and react to demands from a CofP that is willing and increasingly able to take actions that can affect business continuity. Traditional MNE risk management has centred on three dominating domains: financial, political, and cultural and country risks (Ghoshal, 1987; Kot & Dragon, 2015; Lou, 2009; Miller, 1992; Shrader, et al., 2000). While these have proved useful in the assessment of macro or national level threats, they fall short when evaluating how CofP can pose a threat to business continuity. Knowing that companies who operate outside their home country will to some extent be affected by these types of risk, they have implemented different management approaches to see these risks mitigated (Hillman & Hitt, 1999). However, stakeholders, including CofPs, are, in an increasingly globalised world, able to communicate efficiently and almost instantaneously across borders, using readily available communication technologies, allowing individual organisations and institutions to quickly question an MNE's legitimacy, reaching a global audience in a matter of days, hours or even minutes. The interconnectedness and speed at which information travels makes traditional risk management practices inadequate in the identification and mitigation of possible threats, as they quickly evolve outside the management control of the MNE.

The mining industry is one of the best industries through which to observe how firms interact and affect CofP (Bebbington, et al., 2008; Kemp & Owen, 2013; Prno & Slocombe, 2014). Mining operations are regarded as intrusive through changes to the physical environment, but there are also cultural and financial changes that challenge traditional ways of life (Franks & Cohen, 2012; Kemp & Bond, 2009). Armenia has witnessed how mining affects financial,

political and social development (World Bank, 2015; IMF, 2016). With the country's relatively small size, villages and towns are often situated within just a few hundred metres of what are some of the biggest mining operations in the region. The mining industry and the country of Armenia are therefore an ideal setting to investigate how these mining MNEs manage the risks of being located close to an increasingly influential stakeholder group, namely the CofP.

This paper fills a gap in the MNE risk management literature by answering the research question, how do mining MNEs operating in Armenia reduce community risk by increasing trust?

The paper starts with a literature review, identifying two gaps in the current MNE risk management literature when it comes to identifying and mitigating risk origination from CofP. An inductive approach is used as a conceptual theoretical framework, based on the legitimacy-based view (LBV) (Kostova & Zaheer, 1999; Stevens, et al., 2016), is developed and tested, using risk management as a tool for community risk management. From there, the paper moves on to explore how LBV can be used to analyse current community risk management practices using fieldwork data from MNEs operating within the Armenian mining industry. The aim is to show that trust rather than objectively identifiable uncertainty is the dominant parameter when managing risk from CofP.

4.3 Theory: International business perspectives on risk management

The MNE literature predominantly describes three risk domains that are unique to MNEs: financial, political, and cultural and country risk (Figueira-de-Lemos, et al., 2011; Kot & Dragon, 2015; López-Durate & Vidal-Suarez, 2010; Miller, 1992). While these types of risk also affect domestic companies, the MNE is at a disadvantage when it comes to their identification and mitigation. These risks are made salient because of their close connection with foreign markets, lack of knowledge about the political and cultural environment in the host country, and the need to cater to a much wider international stakeholder constituency. The following section is an account of the three risk domains in the MNE risk management literature and identifies gaps when it comes to identifying and mitigating risks originating in local communities.

4.3.1 Financial risk

Financial risk concerns variance in the domestic currency value of assets or exchange risk, interest rate and equity market variability, affecting operating income and attributable to

unanticipated changes in foreign or international financial markets and systems (Lou, 2009). Commodity prices can vary both on the cost and the income side—for example, when gas and oil prices surge or the price of products such as copper or gold prices varies, as seen in mining. These variations can cause costs to rise unevenly, as the host country infrastructure and transportation costs might be affected; as a result, they also affect exchange rates, interest rates, employment situations, government spending and numerous other relevant variables (Hagig & Sivakumar, 2009). Exchange rate risk comes from fluctuations in currency price affecting the local cost level compared to the market in which the MNE is selling its commodities. As in the commodity price risk case, it is possible for changes in the value of local currency to have a significant impact on cost levels. The most common way to estimate exposure to financial risk is to use the valuation technique called value-at-risk (VaR) or its equivalent, which enables the risk decision-maker to calculate the maximum loss that the corporation can risk losing over a specified time and at a specific probability level (Artzner, et al., 1999; Jorion, 1996). The approach is to use historical data and extrapolate this into a probability statement about how financial assets change prices over a given period. Calculating risk exposure using VaR is widely employed by MNEs in financial institutions such as banks and pension funds, but also in production units where commodities have a dominant role. Alternatives have been developed, focusing on cash flow or market exposure that could potentially affect short-term profitability or expose the corporation to its competitors (Bowen, 2009).

4.3.2 Political risk

Political risk is defined as the arbitrary consequences arising from political events that affect a firm's ability to operate (Butler & Joaquin, 1998; Miller, 1992; Simon, 1984). These types of risk constitute changes in what stakeholders perceive as the rules of the game and can have a significant impact on MNEs, as changes occur to the fundamental premise of doing business in a host country (Boddewyn & Brewer, 1994). Political risk includes non-market events from political institutions, and economic and social changes including riots; or, on a smaller scale, politically motivated vandalism, sovereign debt restructuring resulting in changes to the economic infrastructure, or expropriation of land and private enterprises. The impact of a wide range of government policies (macroeconomic, social, labour, industrial, trade, foreign exchange and so forth) also affects the MNE's financial and competitive situation. Political risk has been widely studied, as it is a factor that entails a large degree of uncertainty and has a potentially significant impact on business continuity (Bekaert, et al., 2014; Goderham, et al.,

2013:104). Recent international business literature is centred on the identification of potential retrospective mitigation, and there is a major concern about the role of MNEs when it comes to interfering in the process itself (Bekaert et al., 2014; Henisz & Zelner, 2005; Hillman & Hitt, 1999). MNEs are continually being accused of having political agency and significant power to interfere in the political process, both on a global and on a local scale (Holterman, 2014).

Political risks are related to three sources of uncertainty: ownership, operational and transfer risks (Lou, 2009). Ownership risk is a threat to the current ownership structure or to the ability of an MNE to select or shift its governance structure. Threats to ownership structure can take different forms, but the most extreme form is the expropriation of land, either by forcing owners to transfer property rights to the government, through nationalisation, or by forcing the company to divest and thereby lose potential markets and costs that have already been invested. Expropriation is especially common within the extractive industries, such as oil and mining, where the political incentive to take over ownership rights can be strongly supported by the local population. Operational risk includes any change to the legislative system under which the foreign firm operates—for example, in the form of arbitrary taxation where foreign companies are singled out, or where the legislation disproportionately impacts individual companies within a sector, such as by taxing exports of certain raw materials or implementing import tax on machine equipment. Lastly, there can be political risk from controls imposed on the transfer of production factors, limiting the outflow of capital, raw materials or prefabricated goods. The threat of imposing capital controls can come from governments who want to protect certain domestic industries from competition or ensure that capital does not leave a country in times of financial instability.

4.3.3 Cultural and country risk

Cultural and country risk has traditionally been hard to measure and the literature does not completely agree on what this type of risk should include when it comes to measurable parameters (Hoti & McAleer, 2004; Kogut & Singh, 1988). This is possibly because this type of risk cannot be isolated, but is made up of both endogenous and exogenous factors that contribute to the overall assessment and of which at least some elements are outside the sphere of control of the individual country. Such risks are closely interrelated with political and financial risks, as they are both affected by the political process and by macroeconomic developments, sometimes to a degree where they are inseparable.

However, cultural and country risks encompass the economic, social, financial,

infrastructure and demographic aspects of uncertainty that might affect the business climate on both a long-term and short-term basis (Lou, 2009). These risks are divided into three distinct categories that affect the overall risk assessment; economic, the institutions at national and sub-government level, and social and cultural factors. The institutional environment built at the national and sub-government level is important as it constitutes the framework within which the MNE operates. At a national level, the institutional frames are made up of rules, both formal and informal, and regulations that affect the organisation (North, 1991). On the sub-national level, centred on regional councils or municipalities, it is the institutions built from the practical implementation of national rules and regulations in the particular business environment that affect risk assessment. The nature and rigidity of the institutional environment determine to what extent risk is induced or reduced from a risk management perspective (Burki, 2012; Feinberg & Gupta, 2009; Makhija & Stewart, 2002). Indicators of these types of threat are evident when investigating levels of corruption, the ability of the government to enforce its rules and regulations, and to what extent the government can provide services to new business.

Secondly, there are economic factors that can affect the level of uncertainty, including the extent to which the country is capable of managing its economic environment, its liabilities and ability to meet financial obligations, and finally the political and institutional environment (Garvas, et al., 2016). Factors include GDP growth, inflation, export/import levels, outstanding debt, international ratings (S&P, Moody's, etc.) and interest rates, but also political factors such as changes in government. Human rights conditions and the presence of armed conflict can be factors that make up the risk profile (Hagig & Sivakumar, 2009; Hoti & McAleer, 2005:32–67). Institutions are from this perspective both formal, such as laws and regulations, governance practice and the use of contracts, and informal, such as religious and cultural practices, customs and traditions, or other forms of social behaviour (North, 1991; Miller, 1992; Williamson, 2000). While cultural and institutional factors can be hard to measure objectively, if at all, they are identified within the international business literature as important when organisations establish legitimacy with their stakeholders and thus in their management of non-technical risks. These social factors can affect the level of uncertainty and which come from the system of belief, values and attitudes of stakeholders which are not reflected in current institutionalised government policies or business practice.

4.3.4 Community risk

While the management of risk from the MNE perspective targets the main concerns that

MNEs have when engaging in foreign direct investment (FDI), risk from local communities is a key concern that is increasingly important (Bebbington et al., 2008; Kemp & Owen, 2014). These perspectives all come up short when addressing the relationship between MNEs and the CofP and the risks this relationship entails. While they represent adequate measures of risk on a national level, there is a lack of context specificity regarding MNE exposure to financial, political or institutional changes identifying local communities as a unique source of risk events. Managing this relationship is increasingly important as local communities gain access to communication networks and other forms of technologies that enable them to communicate unhindered, not only at a national level but also globally, putting the MNE at risk from influential actors. Localised events can thereby attract the attention of salient stakeholders, both nationally and internationally (Campbell, et al., 2012). When the MNE risk management literature describes local communities as being a source of risk, it refers either to political risks or to events that need to be handled by managers at the local level (Lessard & Lucea, 2009; Stevens et al., 2016), and as part of the wider stakeholder group that needs to be addressed together with customers, employees, suppliers and/or an undefined group of communities, or those marginalised because they "are not engaged in transactions with the corporation and are not essential for its survival" (Clarkson, 1995:107; Hillman & Keim, 2001). It can be argued that CofP should not be regarded as a separate and salient stakeholder group; however, the evidence presented on the impact of corporate social responsibility (CSR) and stakeholder engagement suggests that there should be more attention given to the field because of the increased effect of CofP on business continuity (Campbell et al., 2012; Husted & Allen, 2006; Park, et al., 2014). The CSR literature related to the mining industry contributes to this discussion by its focus economic, social and environmental sustainability but also a way for the industry to justify its existence to a larger constituency (Jenkins & Yakovleva, 2006). The industry has given more attention to the area by increasing its community engagement activities and in an increasing number of cases this has been done under a CSR agenda (ICMM, 2015; Kemp et al., 2011; Veltmeyer & Bowels, 2014; Yakovleva & Vazquez-Brust, 2012). It is this gap in the MNE literature that this paper is trying to close by conceptualising community risk within an MNE risk management-specific context.

4.4 MNE risk management strategies through legitimacy-seeking mitigation

There are three distinct strategies that MNEs deploy to target these risks: the bargaining power approach (BPA), the political institutions approach (PIA) and, most recently, the

legitimacy-based view (LBV) (Henisz & Zelner, 2005; Kobrin, 2009; Kostova & Zaheer, 1999; Stevens et. al., 2016). Bargaining power within the BPA strategy stems from the need for one party to acquire the resources of another. From this perspective, the parties are involved in a political trade and exchange resources in much the same way as prescribed in economic theory, where the two parties each have something that the other party wants to acquire (Boddewyn & Brewer, 1994). For a bargain to be successful, both sides must be willing and in a position to make a trade-off between equivalent commodities, and none of the traders must be willing or able to force another party to comply or to circumvent the bargaining process.

The PIA strategy entails the MNE seeking to remedy a potential misalignment between the disturbance caused by the new entry and the current institutional actors in the environment (Henisz & Zelner, 2005). Risk in such cases originates from the political actors when they question the legitimacy of the MNE by creating an interpretive framework that places the disturbance in a greater institutional context, where the changes proposed are deemed inconsistent with the orthodoxy of the current institutional status.

The LBV approach focuses on risk mitigation efforts based on the organisation's legitimacy claim, in contrast to the market focus in the BPA and the narrow political stakeholder perspective in the PIA strategy. Legitimacy is a generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions (North, 1991; Suchman, 1995). According to Suchman, there are three types of legitimacy: pragmatic, moral and cognitive. Pragmatic legitimacy is related to stakeholders close to the MNE and focuses on gaining acceptance for actions that are in the self-interest of the organisation. Moral legitimacy rests "not on judgements about whether a given activity benefits the evaluator, but rather on judgments about whether the activity is the right thing to do" (Suchman, 1995:579), and thereby differentiates itself from the pragmatic approach by focusing on the 'moral compass' or norms of the organisation. The final approach is cognitive legitimacy, which involves the taken-for-granted aspects of culture that are a given in a particular social setting, or actions that are regarded as comprehensible or plausible and meaningful by stakeholders.

Organisations can gain or lose legitimacy through commitment and trust (Tasavori, et al., 2014:41). An MNE shows more or less commitment to the common interests it has with its stakeholders by communicating and assigning resources that strengthen the relationship. By assigning resources to a given stakeholder group, an MNE shows it takes the relationship seriously, and that their claims are regarded as important. On the other hand, an inadequate

allocation of resources can result in a perceived lack of commitment and thereby a loss of legitimacy. The rationale for estimating when enough resources have been committed is determined case by case and is based on the individual preferences of the stakeholders. They communicate when inadequate resources have been deployed by signalling a loss of legitimacy or by partnering with more powerful stakeholders who are in a position to make influential claims. Trust is gained when two parties are confident in the reliability and integrity of their relationship, and is related to qualities such as competence, honesty, responsibility, helpfulness and benevolence. The LBV perspective has gained increasing acceptance in the international business literature as being critical to MNE risk management practices, and has been found to be useful in a wide range of cases beyond its original political domain (Kostova & Roth, 2002). Table 6 summarises the LBV perspective on financial, political, cultural and country, and community risks.

Table 6. MNE risk management from an LBV perspective

		Type of risk			
		Financial risk	Political risk	Cultural and country risk	Community risk
Orientation of risk management practices	Perception of legitimacy	Market-driven pragmatic orthodoxy	Societal moral-driven orthodoxy	National cultural-driven orthodoxy	Localised normative-driven orthodoxy
	Mitigating behaviour	Trust building by commitment to recognised governance systems	Trust building by commitment to recognised systems and standard institutions	Trust building by commitment to national economic, institutional and cultural development	Trust building by commitment to localised capacity and institutional development

4.5 Method

In order to test how the LBV can explain how mining MNEs in Armenia manage financial, political, cultural and country, and community risks, a multiple case study was conducted. The case study approach provides a platform from which it is possible to acquire in-depth knowledge about particular contemporary social phenomena (Flyberg, 2006; Yin, 1994). The multiple case study approach was chosen as it provided an opportunity to compare how the LBV approach was utilised in risk management practices across mining MNEs and in the case of community risks towards CofPs using the criteria summarised in Table 6. Through this design, it is possible to eliminate risk management practices or mechanisms that were utilised only within a particular narrow local setting and so show that there are common causal tendencies at work that precede the local context (Archer, 2010; Eisenhardt, 1989). It is therefore possible to show how there is a causal connection which involves the same mechanisms, regardless of how the MNE-community relationship transpires on the individual CofP level. The LBV prescribes that community risk is guided by a localised normative orthodoxy where risk mitigation happens through trust building facilitated by the resource commitment to capacity and institutional development. Thus, in order to answer the research question on how mining MNEs operating in Armenia reduce community risk by increasing trust, the identification of such risk management activities will be the focus of analysis.

The research was conducted from 2014 to 2016 and included five of the nine mining MNEs active in the Armenia at the time GeoProMining, Vallex Group, Lydian International, Cronimet and Dundee precious metals (Table 7). The data collection was made up of desk research, field observations and interviews with key informants. publicly available information was collected on the business environment in Armenia, with a particular focus on reports and surveys targeting the mining sector. Available public information on each MNE related to their entry into the country and their relationship with the CofP was also collected. Based on this information were five mining MNEs, who are operating in close proximity of villages or towns, selected for further investigation using on-site observations and interviews, in the case (Lydian International) where the mine were not yet operational, had explicitly named CofP as a key stakeholder group. A total of 36 semi-structured interviews were conducted with MNE managers, CofP, CofI, government officials and experts related to the industry.

An interview guide was created based on the literature review and 16 exploratory interviews helped refine the interview guide, targeting indicators of financial, political and cultural risk issues that could be encountered by the MNEs. The guide also functioned as a

template for the coding scheme (Flick, 2009) used to thematically code the interviews, corresponding to the four risk types (financial, political, cultural and community risks). As the same guide and coding scheme were used in all interviews with both MNE managers and CofP members, it was possible to compare cases across MNE-CofP relationships. It was possible to secure interviews and site visits at five mining MNEs and nine communities.

The following table 7 provides an overview of the individual mining MNEs included in the study and provides basic information about their home country, their location in Armenia, scale and location of their operation, their systems of CSR governance and company-specific information. The first column shows the name of the MNE, as based in the home country. The second column shows the MNE home country, followed by the type of activity, which states the type of metal ore that is being mined. The next column shows the mining stage of operations: 'exploration' indicates a mine is being planned and the infrastructure needed is being built; 'production' is when the mine is in operation and ore is being produced. The place of operation is the village(s) or town that is nearest the mine, and/or where the ore is being processed. The column indicating years of mining operations shows the approximate number of years the mine has been in the exploration and producing phases in total, in some cases under different ownership. Number of sites indicates how many sites the MNE is active in: in some cases, one site can affect several local communities, while in others there are several mines near the same community. The final two columns indicate whether the MNE and subsidiaries are involved in CSR and what type of international normative standard they are following, if any. If the MNE follows the Global Compact, this is indicated as UN; in cases where the company has deployed the International Finance Corporation, the designation IFC is used (IFC, 2012); this is indicated as World Bank. These standards are in some cases used in combination with one or more of the standards developed by the International Standards Organisation (ISO), such as ISO 26000 (social responsibility), or ISO 14000 (environmental management) (ISO 14000, 2009; ISO 26000, 2012). Other approaches to CSR include self-developed standards and health and safety guidelines, which are internally developed. None of the MNEs adopts systems which target local communities as a unique source of risk as an approach to risk management; however, references were found to their social impact or community engagement activities in CSR programmes or the equivalent, which suggests recognition that mining does result in changes to communities, and that at least some of the MNEs believe that this impact could be negative.

Table 7 Mining MNEs in Armenia

MNE	Ownership structure	Home Country	Type of Activity	Stage of Mining Operations	Approx. Number of Employees	Place of Operation	Subsidiary	Years of Mining Operations	Number of Sites	CSR Activities	Type of CSR Standard
Cronimet	Limited Liability Company	Germany	Copper/molybdenum	Production	1000+	Karajan	Zangezur copper-molybdenum complex (ZCMC)	50+	1	Yes	Self-developed non-standardised approach
GeoPro Mining	Limited Liability Company	Russia	Copper/molybdenum	Production	1000+	Agarak, Zod (Ararat) and Megradzor	Agarak Copper-Molybdenum Mine Complex	25+	1	Yes	OHS AS 18001 and self-developed, health and safety
Vallex Group	Limited Liability Company	Cyprus	Copper/molybdenum	Production	1000+	Teghut and Shnogh	Teghut CJSC	2	1	Yes	World Bank (IFC - Performance Standards on Environmental and Social Sustainability)
Lydian International	Public Limited Company	Canada	Gold	Exploration	>25	Vayots Dzor, Seravan and Gndevaz	ZAO Geoteam of Armenia	6	1	Yes	World Bank (IFC - Performance Standards on Environmental and Social Sustainability)
Dundee Precious Metals (acquired by Polymetal, 2016)	Public Limited Company	Canada	Gold, Copper, Silver, Zinc	Production	1000+	Kapan	Deno Gold	+10	1	Yes	UN (Global Compact)

4.6 Analysis: The MNE approach to risk management in Armenian mining

Armenia is a small country (around 29,000km²) with a significant deposit of minerals, including copper, gold, iron and other metals (Mining Journal, 2011). Armenia’s reliance on the income from minerals or related industries is quite significant, making up around 50 per cent of all exports, so it is a key contributor to the gross national product and foreign currency (Economist, 2015; ICMM, 2014). The infrastructure for transporting mining products is affected by the geopolitical situation: all metal ore is transported through neighbouring Georgia in order to reach the world market, increasing the overheads for all mining companies producing in the country. The alternative border crossings of Turkey and Azerbaijan are in practice closed for commodity export due to the conflict over the autonomous region of Nagorno-Karabakh, and Iran to the south is only now beginning to be opened up after thirty years of sanctions.

4.7 Managing financial risk

Financial risks involve exchange, interest rate viability, and equity market and commodity market risk. A large percentage of the fixed costs in Armenian mining come from imported specialised machinery unique to the mining industry, and equipment from Russia, Canada and Denmark is especially being used, purchased in currencies such as the US dollar and the euro. The equipment is funded by raising capital through loans on the domestic and international lenders market or by selling the project on the equity market, exposing mining companies to exchange, interest and equity risk, as inflation or the volatility of the market affect funding and cash flows. The Russian economy is under international sanctions from the European Union and the United States of America due to the uncertain situation in Ukraine, making it costly to borrow capital from Russian banks that have traditionally been a source of funding for at least some of the mining MNEs. In order to hedge their financial risk in this volatile market, all mining MNEs are trading in either American dollars or euros, as these currencies are regarded as more stable than the local currency, the dram, and the Russian rouble. Domestic interest rates are quite high compared with the world market, at around 7.5 per cent in mid-2016 (Central Bank of Armenia, 2017), which means that significant investments in the mining sector from abroad are made using primarily foreign institutional investors and, to some extent, the equity market, where prospective projects are being offered and financed. For example, the Vallex Group, a Cyprus-based MNE, secured funding from the Danish pension fund PensionDanmark to buy processing equipment from the Danish engineering company FLSmidth, and the Canadian MNE Lydian International secured finance by raising funds on the equity market and the World Bank (World Bank, 2015). It is not unusual for mining companies to find project-financing outside the host country, especially when it comes to developing markets such as Armenia, where the equity needed is mostly unavailable. Using the equity market or institutional investors outside the country as a source of financing reduces uncertainty regarding the possible profitability of the project, as the dividend or interest levels are known and stable; however, when institutional investors fund projects, such as PensionDanmark, there can be legitimacy requirements imposed upon the MNE—in this case, that they should document their social and environmental impact and implement systems for monitoring their performance. MNEs that is unable to secure funding from institutional investors or through the regular equity market fundraise through other channels. For example, Orogen Gold (United Kingdom) and Global Gold (United States of America) are both financed through the project sales of their gold

mining projects. Both GeoProMining (Russia), which is involved in several gold and copper sites, and Fortune Oil (China), which explores for iron, are financed by their home countries.

The mitigation of financial risks is driven by market orthodoxy, where MNEs, government agencies and investors make an evaluation of risk levels by comparing given events to their governance systems. These systems function as a measure of the degree of trust ascribed to a particular risk management approach. For example, when engaging in financing mining projects, mining is one uncertainty factor in the significant fluctuations in the commodity market. The market for metal ore has proved quite volatile in recent years: while the cost of copper had been relatively stable at around 2,000 USD/tonne until around 2004, the price peaked in 2011 at around 4,500 USD/tonne and fell to a low in mid-2016 at around 2,100 USD/tonne (Nasdaq, 2016). It takes somewhere between five and ten years for a prospective mining project to be financed and made operational, meaning that commodity price volatility has a significant impact on how mining projects are perceived by investors and there is a considerable time before a return on a possible investment is realised. To make the project feasible and thereby legitimate for investors, commodity prices are estimated conservatively by mine owners; however, with the changes seen, these estimates are difficult to predict with any certainty. For example, the Teghut project was forced to suspend the financing of one of its loans when the price of copper decreased by more than 50 per cent in the latter part of 2008, at a time when the company had only calculated for five per cent. The same trend is visible in the gold market, where prices have moved from a low of around 800 USD/ounce (2008) to a peak of around 1,900 USD/ounce (2011), and down to around 1,300 USD/ounce in mid-2016 (Nasdaq, 2016). The fluctuations in the commodity market create significant uncertainty surrounding the key MNE activity (mining for ore), which is outside the control of the individual company and its investors, making calculations on VaR subject to significant levels of uncertainty. As an indication of the significance of legitimacy claims about commodity price, FLSmidth was providing equipment to Vallex. PensionDanmark provided a loan which was hedged by the Danish Export Credit Foundation (EKF) at a time when the price of copper ore was at a record high as an indicator for would-be investors and suppliers that trust in the company that they invest in is more important to the risk decision-maker than the obvious immediate financial risk. That FLSmidth had already sold equipment in 2008 showed commitment and a belief that Vallex would be able to honour its obligations despite falling copper prices. When the commitment was renewed in 2013, the relationship was reaffirmed and expanded with the inclusion of institutional investors who were willing to invest significant

sums in the project. As stated by PensionDanmark (2013), one of these investors: "We are killing two birds with one stone through our partnership with EKF. On the one hand, the partnership will ensure a return for our members well above the bond rate, and on the other hand, it will help make more Danish export orders possible at a time when more traditional financing is difficult." This indicates that the partnership superseded the short-term financial risks when in an insecure commodity market and confirms the legitimacy of Vallex. While bond rates were higher for Vallex it was significantly less than it would have had to pay had it secured funding through local Armenian or Russian banks.

4.8 Managing political risk

Political risks are made up of ownership, operational and transfer risks. As in most other countries, the Armenian legislation is designed to protect businesses from expropriation and arbitrary decisions by the government that can affect the ownership structure (World Bank, 2016). In the aftermath of the collapse of the Soviet Union, there were some cases where property rights were infringed, and so-called oligarchs gained control over property that was legally purchased by foreign companies. While the practice is still witnessed today, it is less common, and often as part of a legal claim rather than a direct theft of property. These cases are often exposed in the press, which makes it more difficult for an oligarch or other criminal organisation to receive overt public support from government officials. The situation for private residents is, however, much worse, and there are frequent violations of property rights, either in the form of expropriation or land-grabbing by the state. One of the tools used to infringe property rights has been the Mining Code (2011).

The legislation has been used several times to transfer private property as part of mining and other types of project (Ecolure, 2016), thereby creating significant resentment from a CoFP towards both mining companies and the government. For example, two of the biggest copper mining sites in the Caucasus are located in Armenia, and they are both owned by foreign MNEs (Mining Journal, 2011). The introduction of the mining code in 2011 ensured that mining permits given to companies gave them exclusive rights, for a set period, for the geological exploration and extraction of minerals, after which the rights were to be transferred back to the Armenian state (Mining Code, 2011). As illustrated by the Major of Kajaran "The company should seriously consider all grievances, since it was related to whole public, population and not one person only. The company also dealt with the Government; therefore, they couldn't disregard the government policy, they couldn't act independently and had to be accountable to

Government and Kajaran city.” (Interview, Kajaran, 2015) The mining code also gave mining companies the right to manage their programme or project without interference from the state or other actors, provided that they followed Armenian law. The code furthermore provided assurances that the rights of investors were protected, thereby reducing political risk. As a consequence of these changes, there has been an increase in FDI coming into the Armenian mining sector. Most prominent is the start-up of Vallex, described above, and a massive investment by the Canadian MNE Lydian International’s gold mine project, located in the centre of the country (Hergnyan, 2015; Stevensen, 2014). Both of these projects have received significant political support from the government and have attracted investments from institutional investors such as the European Bank for Reconstruction and Development (EBRD) and the World Bank International Finance Corporation (IFC), both investors who otherwise do not engage in the extractives industry like PensionDanmark (PensionDanmark, 2013; Lydian, 2016); however, investments from this type of investor come with requirements to adhere to certain internationally recognised standards. In this case the IFC Standard on Environmental and Social Sustainability includes a special appendix on extractives, and is a standard that later became the Extractive Industry Transparency Initiative (EITI) (IFC, 2012, 2015). The CEO of PensionDanmark described the investment in the Vallex mining project as “a project that is setting new standards for mining in Armenia. We have imposed a number of requirements, which will mean that the mine will be the first in Armenia to satisfy the international standards” (PensionDanmark, 2013). The use of CSR standards further emphasises that the industry needs to justify its existence through the introduction of social and environmental engagement programs (Bebbington et al. 2008; Jenkins & Yakovleva, 2006) and that investors, like PensionDanmark, look for these types of activities to control risks.

The Societal-moral orthodoxy becomes apparent through the intervention of political actors and is institutionalised through the active encouragement (but not the legally requirement) of the government to comply with chartered organisations’ standards. One of the objectives of the Mining Code (2011) was to ensure that an increase in tax revenues could be collected from the industry, and that the Armenian legislation was in line with international standards for the extractives industry. As a result of this process, the World Bank, which consulted the Armenian government on the design of the code, estimated that the tax revenue from mining royalties would increase by 1.5 per cent to a total of 18.2 per cent of GDP as the legislative changes took full effect (World Bank, 2014). Compared to international standards, the mining tax is still relatively low and the fluctuation in commodity prices has not impacted tax revenues from the

industry significantly (IMF, 2016); however, the implementation of legislation has reduced the political risks associated with the untimely government interference and lack of transparency in decision-making. Transfer risks are associated with the outflow of capital and goods from a country to foreign entities outside the control of local government, and are thus considered a source of political risk. While there have been some attempts by the Armenian government to cap capital flows, they have proved largely inefficient, which is especially evident in the wake of the sanctions against Russia and instances where large sums have transited the country from Russia into Western Europe and beyond (Economist, 2015; Stevensen, Aghalaryan 2014).

Another challenge which is much more salient is the political climate related to the transfer of commodities out of the landlocked country. The only open route for ore out of the country is by railway through Georgia and, while the two countries have a working relationship, it entails higher transportation costs for mining companies operating in Armenia. The country has mainly been trading agricultural products with Iran to the south, but the infrastructure in the southern region of the country does not support the significant increase in traffic associated with mining. While a new north-south road is being constructed, connecting Georgia and Iran, it is far from being finished, and the project has been delayed several times due to lack of financing.

4.9 Managing cultural and country risk

As a developing and conflict-prone region, country risk in Armenia is perceived to be significant by most measures. For example, the OECD has classified the country as being at the second highest risk level, which is the same as Angola, Rwanda and Honduras (OECD, 2016). Inform (2016), an inter-agency institution between, among others, the United Nations Development Programme, the European Union and the World Food Programme, estimates that risks in terms of, for example, natural disasters, infrastructure and healthcare are significant in some areas. As stated earlier, cultural and country risk is made up of four categories: economic, institutional at national and sub-government level, social and cultural/language factors. When assessing economic uncertainty from a country risk perspective, the focus is on the macroeconomic forces that might affect the business environment. As Armenia is a developing and landlocked country, even small changes in the geopolitical landscape commonly can have a profound effect on the country's economic situation. The situation with Azerbaijan over the region of Nagorno-Karabakh and the new opportunities that might arise in Iran due to the lifted sanctions both have a significant effect on perceived risks. More distant relationships with Russia and the Eurasia Economic Union (EEU) create new possibilities, but there are also

stronger economic ties between Armenia's future development and the volatile Russian economy. The failure to create a working partnership agreement with the European Union has had a significant effect on trade relations but has also provided new possibilities that MNEs can explore. The economic welfare of Armenia has been evaluated quite differently over time. In the 2000s, the country was designated the 'Caucasus tiger' by the World Bank (2007), only to find that less than a decade later it was struggling after a diamond trade bubble burst and the global economic crisis, resulting in a 14 per cent economic retraction (IMF, 2015). This increased complexity of both internal and external developments has had a significant impact on the country and has meant that the economy has largely stalled, with growth rates falling to 2.6 per cent of the GDP in 2014.

The government of Armenia is not only faced with geopolitical challenges, a failing economic policy and a global economic crisis, but also a high level of corruption that has solidified into strong kinship networks (Aliyev, 2014). The ruling elite are mainly comprised of people within the same kinship networks, partly centred on people from the Karabakh region and veterans of the war. The lack of career opportunities for individuals who stand outside these networks has pushed an already high migration rate to an annual level of around five per cent; however, these numbers are shrouded in a high degree of uncertainty, as there has been no recent population census.

Cultural factors affect mining MNEs' risk assessment in different ways. The traditional tools deployed in MNEs in relation to social and cultural dimensions focus on differences or distance between cultures and a country's social norms (Hofstede, et al., 2010; Trompenaars & Hampden-Turner, 2012); however, these perspectives do not include an adequate explanatory framework for why some companies are perceived as legitimate, despite being culturally different and subscribing to a different set of norms, while others are rejected despite efforts to integrate. It is therefore more relevant from a legitimacy perspective to investigate why and how some companies are accepted into a cultural setting while others are not. Taking into account that the many stakeholder groups in Armenia have different and sometimes contradictory legitimacy demands, MNEs in the country are engaged in a wide range of legitimacy-seeking activities: for example, much of the sustainability reporting is directed towards civil society actors concerned about the environmental impact of greenhouse emissions, energy usage and water management (DPM, 2014; GeoProMining, 2016). But as illustrated by the testimonial of a NGO there can also be other forms of legitimacy demands; "Their livelihood is changing they are losing their connection with nature. All the rituals like going to the river, songs and other

rituals. People from Teghut can't even go to their sacred place a small sanctuary they can't even access this place. This is especially important to the people from this village as they immediately respond and identifies with nature." (Interview Save Teghut, 2015). Legitimacy-seeking activities were also witnessed on a national governmental level when Vallex received a visit from the President of Armenia in 2014, where he openly endorsed the mining project (Vallex, 2016), and when the same company took sides in the Nagorno-Karabakh conflict by hosting a visit from the region's president in 2016. Another example is Canadian Lydian International receiving an endorsement from the Ambassador to the United States (Canada does not have an embassy in the country, only a consulate) as a high-ranking foreign emissary who visited their gold project together with the Armenian Prime Minister and the Minister of Energy, thereby legitimising a project that is highly controversial in the eyes of many civil society actors (Armpress, 2015). Events like these also illustrate how political, country and cultural factors are intertwined and how, in combination, they influence the overall risk assessment.

4.10 Managing community risk

Community risk materialises when an MNE loses legitimacy with a CofP; it is related to the difference in resource commitment requirements by community groups and the efforts of the MNE (see Table 8 for an overview of MNE resource commitment to local villages and towns). The MNE risk management literature prescribes that an entering MNE will invest resources in order to mitigate financial, political, and cultural and country risks. However, as seen above, these risks are all associated with national level events that to varying degrees affect the ability of the mining MNE to operate. Community risks are distinct from these types of risk as they stem from a localised normative-driven orthodoxy which originates from the impact the mining MNE has on the CofP. Mitigation of community risks is perceived to be successful when the CofP regards the MNE as a trustworthy and therefore legitimate actor.

Being seen as legitimate by the CofP can support the MNE's mitigation of financial, political and cultural risks. Different stakeholder groups support or oppose a given MNE's activities and use the legitimacy stance of CofP to legitimise their actions, such as when Vallex was seeking investments and EKF and PensionDanmark required the implementation of certain CSR standards which targeted, among other things, local communities. When civil society actors are unable to elicit the support of CofP in their campaigns against projects, as seen in Agarak and Karajan, it is close to impossible to change MNE behaviour or to terminate a given project. Not only did the MNE Vallex commit more resources to CofP, as required by their

investor, but other MNEs also followed the same pattern and invested in community development projects. Cronimet in Karajan has provided educational and subsidised healthcare facilities, created a charity and sponsored sports events in the local town, and the Russian company, GeoProMining, in Agarak, has started to provide scholarships and make improvements to the local infrastructure (Cronimet, 2016; GeoProMining, 2016) (Table 8). The mayor of Karajan articulated the commitment of Cronimet - “As a result of the project, the community has grown from all perspectives, including the community's reputation and within construction” (Interview Kajaran, 2015)—despite expressing concerns about the level of health and safety issues related to the project in the same interview. Different competing narratives are thus a central part of the risk mitigation effort, where various stakeholders portray the MNE in different positive or negative ways that, in turn, solidify the MNE’s legitimacy base. In mining, an MNE’s resource investments in the CofP are not only a cost that needs to be calculated as part of its risk management: investments in infrastructure can also be a requirement and a necessary expense for the mining MNE, as it has operational needs for good roads, gasification, reliable electricity and local businesses for procurement. One village (Saravan) had been supported by being provided with cheap loans, from the mining MNE Lydian International, to purchase farming equipment “The village municipality established Public Non-Profit Organization and all the machineries and equipment were under the assets category of that company’s balance sheet, ..., the equipment was only rented at cheaper prices to community members of Saravan village, most of the equipment had been purchased this year,...The village municipality purchased equipment in May, 2014 and loan had already been paid back.” (Interview Saravan, 2015). These investments were done before the mine was operational or construction had even started, illustrating the importance of good relations with the local population.

Activities like these and other investments like providing scholarships or renovating schools is not only to the benefit of local families. It is equally an opportunity for the MNE to create a pool of local human resources that are usually cheaper than sourcing labour and specialists from places further away.

Table 8. MNE Resource commitment to CofP

Multinational Enterprise (MNE)	Resources directed at:			
	Educational facilities	Infrastructure	Cultural facilities	Other activities
Vallex Group	- Kindergarten scholarship	- Roads - Gasification - Repair of houses	- Culture house - Church	- Formal local grievance system
Lydian International	- Playground - Community library	- Water distribution pipeline - Garbage collection - Roads - Irrigation system - Gasification	- Administration building - Culture house - Sports facilities/ competition	- Local hospital equipment - Local TV - Donations and scholarships - Tree nursery project - Ambulance service - Grievance system
Cronimet	- Support of existing educational facilities local and regionally	- Subsidising local municipality healthcare facilities	- Sport facilities	- Charity established
Dundee Precious Metals	- School - Kindergarten	None	- Church renovation - Sports events	- Scholarships - Small business funding
GeoProMining	- Scholarship (education in Russia) - Kindergarten	- Water - Gasification - Fire safety	- Sponsorships (focus on events, education and sports)	

4.11 Implications for the MNE risk management literature

Using empirical cases from the Armenian mining industry, this paper has discussed how legitimacy claims are used as a strategy to mitigate MNE financial, political, cultural and country, and community risks. It has been argued MNEs reduce risks through different risk management strategies that build trust with investors, political and culturally important actors when it comes to the first three risk types. The paper also shows that by building trust with CofP through the commitment of resources, it creates possibilities for mining MNEs to gain access to investments, reduce political interference and improve their general acceptance as leading representatives of Armenian culture and political life have visited their operations. While these results are consistent with the LBV risk management strategy perspective, it is the application to community risk that elicits interesting findings and contributes to the MNE risk management literature. MNEs manage risks from local communities by building trust, and that being regarded as legitimate by CofP members means lower risks; however, this also has effects beyond the community and affects the behaviour of financial, political and cultural actors far beyond the local context. This finding has implications for the MNE risk management literature in several ways.

Firstly, it is possible to mitigate risk from CofP by investing resources in the villages and towns affected by mining MNE operations. These investments not only benefit the community itself, but also the efforts of the MNE to build capacity for its operation in the form of infrastructure and access to human resources. This finding stands in contrast to the other types of risk found in the MNE risk management literature, where there is no direct link between building trust and the operational requirements of the company. The primary focus here has traditionally been on the avoidance of adverse events rather than on the opportunities that can arise from resource commitment.

Secondly, focusing on CofP as a source of legitimacy has an effect on the other types of risk found in the MNE risk management literature, and it is possible to attract investments that would otherwise be unreachable or expensive to gain, as in the example of EKF and the institutional investor PensionDanmark. Here, the use of CSR governance standards was a way for the mining MNEs to structure their financial and political resource commitment, and to gain legitimacy with the CofP as well as from salient stakeholders who had an interest in its non-financial performance both inside and outside the macro-level context. Political actors were affected by these commitments, as they found that it was hard to gain acceptance by the CofP

for their political agenda when community members saw the MNE as trustworthy and legitimate.

Thirdly, community risk management is not simply a linear process where the MNE invests resources to gain the acceptance of CofP members. When the two actors are interdependent, the nature of the relationship changes to one where both seek shared goals and to mitigate common risks. In this way, the relationship develops from one where the distribution of risks has been unequally shared, favouring the MNE, to one where both parties stand to gain. This presents an opportunity for the MNE to utilise its risk management resources where the effect on its community risk exposure will be greatest. Knowing that building roads, or providing access to electricity or gas is not only an operational requirement, but also, with a small extra use of resources, can reduce risk exposure in a wide range of other areas, provides a strong incentive. CofPs can gain much needed infrastructure and improve their institutional environment by directing the MNE's resource commitment where the community as a whole wants to evolve. It is in this way possible for the community to build linkages from the local mine to other industries, such as agriculture or machine maintenance, by allocating the MNE's community risk resources. In return for these investments, the community gives the project legitimacy and thereby reduces the chance that more critical stakeholder groups that have the resources to expose the mining MNE to financial, political and cultural risk events that can threaten business continuity will use them.

Understanding the importance of the CofP and the importance of community risk is a central contribution of this paper as they are a catalyst for much larger risks that both practice and MNE literature. While CofP does not seem to have many resources available to them or be great in numbers that part of the arguments made by economic, political and cultural stakeholders when either justifying or delegitimising a mining project. Their importance has been recognised by the industry through investments into villages and towns affected by mining activities and through the inclusion of communities into mining MNE CSR governance systems.

4.12 References

- Aliyev, H.(2014). Civil society in the South Caucasus: Kinship networks as obstacles to civil participation. *Southeast European and Black Sea Studies*, 14(2):263–282.
- Archer, M.(2010). Routine, reflexivity, and realism. *Sociological Theory*, 28(3):272–303.
- Armpress.(17 August 2015). Richard Mills: US greatly values its deepening economic ties with Armenia. Retrived from <https://armenpress.am/eng/news/815455/ssha-viysoko-cenyat-uglublenie-ekonomicheskikh-svyazeiy-s-armenieiy.html>
- Artzner, P., Delbaen, F., Eber, J-M., & Heath, D.(1999). Coherent measures of risk. *Mathematical Finance*, 9(3):203–228.
- Bebbington, A., Hinojosa, L., Bebbington, D.H., Burneo, M.L., & Warnars, X.(2008). Contention and ambiguity: Mining and the possibilities of development. *Development and Change*, 39(6):887–914.
- Bekaert, G., Harvey, C.R., Lundblad, C.T., & Siegel, S.(2014). Political risk spreads. *Journal of International Business Studies*, 45:471–493.
- Boddedyn, J.J., & Brewer, T.L.(1994). International business political behaviour: New theoretical directions. *Academy of Management Review*, 19(1):119–143.
- Bowen, M.(2009). International finance management of international enterprises. In: Rugman, A. M. (Ed.), *The Oxford handbook of international business*. (2nd edition). Oxford: Oxford University Press.
- Burki, U.(2012). Institutional voids and corporate governance: A conceptual understanding. *International Journal of Business and Management*, 7(10):99–107.
- Business for Social Responsibility (BSR).(2003). *The social license to operate*. Retrieved from: http://www.sdsg.org/wp-content/uploads/2013/04/file_BSR_Social_License_to_Operate.pdf
- Butler, K.C., & Joaquin, D.C.(1998). A note on political risk and the required return on foreign direct investment. *Journal of International Business Studies*, 29(3):599–607.
- Calvano, L.(2008). Multinational corporations and local communities: A critical analysis of conflict. *Journal of Business Ethics*, 82:793–805.
- Campbell, J.T., Eden, L., & Miller, S.R.(2012). Multinationals and corporate social responsibility in host countries: Does distance matter? *Journal of International Business Studies*, 43:84–106.
- Central Bank of Armenia.(2017). *Monetary and financial statistics*. Retrieved from:<https://www.cba.am/am/SitePages/Default.aspx>

- Clarkson, M.B.E.(1995). A stakeholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review*, 20(1):92–117.
- Cronimet.(2016). *Cronimet Germany*. Retrieved from: <http://www.cronimet.de/> (Accessed 01.05.2016)
- Dundee Precious Metals(DPM).(2014). *Sustainability report*. Yerevan: Dundee Precious Metals.
- Ecolure.(2016). Ecolure: *New informational policy in ecology*. Retrieved from: <http://www.ecolur.org/en/>
- Economist.(2015). *Country report: Armenia*. London: Economist Intelligence Unit.
- Eisenhardt, K.M.(1989). Building theories from case study research. *The Academy of Management Review*, 14(4):532–550.
- Feinberg, S.E., & Gupta, A.K.(2009). MNC subsidiaries and country risk: Internationalization as safeguard against weak institutional external institutions. *Academy of Management Journal*, 52(2):381–399.
- Figueira-de-Lemos, F., Johanson, J., & Vahlne, J.(2011). Risk management in the internationalisation process of the firm: A note on the Uppsala model. *Journal of World Business*, 46(2):143–153.
- Flick, U.(2009). *An introduction to qualitative methods*. (4th edition). London: Sage.
- Flyberg, B.(2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12(2):219-245
- Franks, D.M., & Cohen, T.(2012). Social license in design: Constructive technology assessment within research and development institution. *Technological Forecasting & Social Change*, 79:1229–1240.
- Garvas, P., Vogiazas, S.D., & Koura, M.(2016). An empirical assessment of sovereign country risk in the Black Sea Region. *International Advanced Economic Resources*, 22, 77–93.
- GeoProMining (GPM).(2016). Corporate website Armenia, retrieved from: <http://www.geopromining.com/en/our-business/operations/agarak/> (Accessed 01/05/2016)
- Ghoshal, S.(1987). Global strategy: An organising framework. *Strategic Management Journal*, 8:425–440.
- Goderham, P.N., Grøgaard, B., & Nordhaug, O.(2013). *International management: Theory and practice*. Cheltenham: Edward Elgar.
- Hagig, M., & Sivakumar, K.(2009). Managing diverse risks: An integrated framework. *Journal of International Management*, 15:286–295.
- Henisz, W.J., & Zelner, B.A.(2005). Legitimacy, interest group pressures, and change in

- emergent institutions: The case of foreign investors and host country governments. *The Academy of Management Review*, 30(2), 361–382.
- Aghalaryan, K.(2014). *Yukos' Armenian subsidiaries' assets are more than double Armenia's state budget*. Retrieved from: <http://hetq.am/eng/news/53789/yukos-armenian-subsidiaries-assets-are-more-than-double-armenias-state-budget.html>
- Hergnyan, S.(2015). *Drop in world copper price hurts Armenia's economy*. Retrieved from: <http://hetq.am/eng/news/59292/drop-in-world-copper-price-hurts-armenias-economy.html>
- Hillman, A.J. & Hitt, M.A.(1999) Corporate Political Strategy Formulation: A Model of Approach, Participation, and Strategy Decisions. *The Academy of Management Review*. 24(4):825-842
- Hillman, A.J., & Keim, G.D.(2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22:125–139.
- Hofstede, G., Hofstede, G.J., & Minkov, M.(2010). *Cultures and organisations: Software of the mind, international cooperation and its importance for survival*. New York, NY: McGraw-Hill.
- Holterman, D.(2014). The biopolitical war for life: Extractives and the Ugandan oil state. *The Extractive Industries and Society*, 1:28–37.
- Hoti, S., & McAleer, M.(2004). An empirical assessment of country risk ratings and associated models. *Journal of Economic Surveys*, 18(4):539–588.
- Hoti, S., & McAleer, M.(2005). *Contributions to economic analysis: Modelling the riskiness in country risk ratings*. Amsterdam: Elsevier.
- Husted, B.W., & Allen, D.B.(2006). Corporate social responsibility in the multinational enterprise: Strategic and institutional approaches. *Journal of International Business Studies*, 37(6):838–849.
- ICMM.(2014). *The role of mining in national economies*. London: International Council on Mining and Metals Raw Materials Group.
- ICMM.(2015). *Indigenous people and mining*. (2nd edition). London: International Council on Mining and Metals Raw Materials Group.
- Inform.(2016). Inform-index for risk management. Retrieved from:<http://www.inform-index.org/>
- International Finance Corporation (IFC).(2012). *IFC performance standards on environmental and social sustainability*. Washington DC: World Bank Group.

- International Finance Corporation (IFC).(2015). *The EITI standard*. Washington DC: World Bank Group.
- International Monetary Fund (IMF).(2015). *Republic of Armenia*. Washington DC: IMF Country Report No 15/65.
- International Monetary Fund (IMF).(2016). *Republic of Armenia*. Washington DC: IMF Country Report No 16/246.
- International Organisation for Standardisation (ISO) 14000.(2009). *Environmental management*. Geneva, Switzerland: ISO Central Secretariat.
- International Organisation for Standardisation (ISO) 26000.(2012). *Guidance on social responsibility*. Geneva, Switzerland: ISO Central Secretariat.
- Jenkins, H. & Yakovleva, N.(2005). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*. 14:271-284
- Jorion, P.(1996). *Value at risk*. New York. NY: McGraw-Hill.
- Kemp, D., & Bond, C.J.(2009). *Mining industry perspectives on handling community grievances*. Centre for Social Responsibility in Mining, Brisbane: Report from The University of Queensland.
- Kemp, D., Owen, J.R. & van de Graff, S.(2012). Corporate social responsibility, mining and “audit culture”. *Journal of Cleaner Production*. 24:1-10.
- Kemp, D., & Owen, J.R.(2014). Community relations and mining: Core to business but not ‘core business’. *Resource Policy*, 38:523–531.
- Kobrin, S.J.(2009). Private political authority and public responsibility: Transnational politics, transnational firms, and human rights. *Business Ethics Quarterly*, 19(3), 349–374.
- Kogut, B., & Singh, H.(1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3):411–432.
- Kostova, T., & Roth, K.(2002). Adoption of an organisational practice by subsidiaries of multinational corporations: Institutions and relational effects. *Academy of Management Journal*, 45(1):215–233.
- Kostova, T., & Zaheer, S.(1999). Organisational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1): 64–81.
- Kot, S., & Dragon, P.(2015). Business risk management in international corporations. *Procedia Economics and Finance*, 27:102–108.

- Lessard, D., & Lucea, R.(2009). Embracing risk as a core competence: The case of CEMEX. *Journal of International Management*, 15:296–305.
- López-Durate, D., & Vidal-Suárez, M.M.(2010). External uncertainty and entry mode choice: Cultural distance, political risk and language diversity. *International Business Review*, 19:575–588.
- Lou, Y.(2009). Political risk and country risk in international business: Concepts and measures. In: *Oxford handbook of international business edited by Rugman, A.M.* (2nd edition). (page 741-760).Oxford: Oxford University Press.
- Lydian.(2016). Lydian international news. Retrieved from: <http://www.lydianinternational.co.uk/news/2016-news> (Accessed 01/05/2016)
- Makhija, M.V., & Stewart, A.C.(2002). The effect of national context on perception of risk: A comparison of planned versus free-market managers. *Journal of International Business Studies*, 33(4):737–756.
- Miller, K.D.(1992). A framework for integrated risk management in international business. *Journal of International Business Studies*, 23(2):311–331.
- Mining Code.(2011). *Mining code of the Republic of Armenia*. Passed November 2011. Retrieved from: www.minenergy.am
- Mining Journal.(2011). *Armenia mining journal*. London: Aspermount.
- Mudambi, R.(2008). Location, control and innovation in knowledge-intensive industries. *Journal of Economic Geography*. 8:699-725
- Nasdaq.(2016). *Commodity price listings*. Retrieved from:<http://www.nasdaq.com/>
- OECD.(2016). *Country risk classifications of the participants to the arrangement on officially supported export credits*. Retrieved from: www.oecd.org/trade/xcred/cre-crc-current-english.pdf)
- Park, B.I., Chidlow, A., & Choi, J.(2014). Corporate social responsibility: Stakeholders’ effect on MNEs’ activities. *International Business Review*.23:966-980
- PensionDanmark.(2013). *EKF and PensionDenmark secure financing of large orders for FLSmidth*. Retrieved from: <https://www.pension.dk/en/english/About-PensionDenmark/News/PD-news/EKF-and-PensionDenmark-secure-financing-of-large-orders-for-FLSmidth/>
- Prno, J., & Slocombe, D.S.(2014). A systems-based conceptual framework for assessing the determinants of a social license to operate in the mining industry. *Environmental Management*, 53:672–689.

- Shrader, R.C., Oviatt, B.M., & McDougall, P.P.(2000). How new ventures exploit trade-offs among international risk factors: Lessons for the accelerated internationalization of the 21st century. *The Academy of Management Journal*, 43(6):1227–1247.
- Suchman, M.C.(1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3):571–610.
- Stevens, C.E., Xie, E., & Peng, M.(2016). Toward a legitimacy-based view of political risk: The case of Google and Yahoo in China. *Strategic Management Journal*, 37:945–963.
- Simon, J.D.(1984). A theoretical perspective on political risk. *Journal of International Business Studies*, 15(3):123–143.
- Stevensen, H.(2014). *Amoulsar gold project updated feasibility study*. Lydian President and CEO Investor Presentation, September 2014.
- Tasavori, M., Ghauri, P., & Zaefarian, R.(2014). The entry of multinational companies to be base of the pyramid: A network perspective. In: Temouri, Y., & Jones, C. (Eds.), *International business and institutions after the crisis*. New York,NY: Palgrave Macmillan.
- Trompenaars, A., & Hampden-Turner, C.(2012). *Riding the waves of culture: Understanding diversity in global business*. London: Nicholas Brealey.
- Vallex.(2016). *Vallex Group*. Retrieved from: www.vallex.com
- Veltmeyer, H., & Bowles, P.(2014). Extractivist resistance: The case of the Enbridge oil pipeline project in Northern British Columbia. *The Extractives and Society*, 1:59–68.
- Williamson, O.E.(2000). The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature*, 38:595–613.
- World Bank.(2007). *The Caucasus tiger: Sustaining economic growth in Armenia*. Washington DC: The International Bank for Reconstruction and Development.
- World Bank.(2014). *Republic of Armenia public expenditure review*. Washington DC: World Bank.
- World Bank.(2015). *Country program snapshot – Armenian partnership*. Washington DC World Bank.
- World Bank.(2016). *Doing business: 2016 data for Armenia*. Washington DC: World Bank IF.
- Yakovleva, N. & Vazquez-Brust, D.(2012). Stakeholder Perspectives on CSR of Mining MNCs in Argentina. *Journal of Business Ethics*. 106:191-211
- Yin, R. K.(1994). *Case study research: Design and methods*. (2nd edition). London: Sage.

5 Community risk management by mining MNEs: Managing local communities in Armenian mining

Jacob Taarup-Esbensen, Copenhagen Business School, Denmark

and

Suren Movsisyan, Armenian National University Yerevan, Yerevan, Armenia

In press - Journal of Business and Globalisation (ISSN online: 1753-3635)

5.1 Abstract

Using field work from the Armenian mining sector, we explore how MNEs practice community risk management. We start by conceptualising communities as communities of place (CofP), directly impacted by mining activities but have few resources, and communities of interest (CofI), as outsiders with an interest in mining projects and the resources to create uncertainty about the mine. We argue that community risk is a precursor to financial, political and cultural risks and that both CofP and CofI can expose the mining MNE to risks, either individually or in unison. We find that mining MNEs focus on mitigating community risks in the initial phases of the mine project, when the impact on the CofP is perceived to be lowest. Our interpretation is that the objective of the risk management practice is to commit resources to CofP for as long as there is a possibility that they will form partnerships with CofI.

Keywords: community risk, mining MNE, risk management, Armenia, liability of outsidership, communities of place, communities of interest

5.2 Introduction

The ability of firms operating internationally to evaluate the chance of loss or to identify an opportunity is central to its survival and future prosperity (Figueira-de-Lemos et al., 2011; Ghoshal, 1987; Haggi & Sivakumar, 2009; Power, 2004). The multinational enterprise (MNE) interacts and balances between multiple stakeholder constituencies across multiple geographical locations and the more diverse the business environment, the more numerous the interests and relationships that need to be managed. Few business environments represent such complexity and difficulty to manage than those originating from local communities in connection with mining projects (BSR, 2003; Franks et al., 2014; Graetz & Franks, 2015; Prno & Slocombe, 2014). In the last decade, the management of risks from local communities has been increasingly important, as the influence of these groups has increased, firstly, because they have gained the ability to communicate with a wider national or even global audience through new communication technologies, and secondly, because civil society actors such as social and environmental non-governmental organisations (NGOs) use local community support in order to leverage their own claims against mining activities (Bebbington et al., 2008; Dana et al., 2009; Holterman, 2014). While it is well documented how mining projects is affecting communities, it is to a lesser degree researched how mining companies are mitigating risk events from these types of stakeholders. To differentiate between different forms of communities, this paper refers to local communities as communities of place (CofP), indicating their geographical closeness to the mining MNE's place of operation, while NGOs and other civil society actors are referred to as communities of interest (CofI), being outsiders but having an interest in the activities of the mining MNE (Calvano, 2008; Selmier et al., 2015). Risks from communities of place can take many forms, but the common denominator is that they originate from villages and towns near the MNE's place of operation, and their epicentre is the community's concerns about their future when subjected to changes induced by the MNE's activities (Calvano, 2008; Horowitz, 2010; Miller & Lassard, 2001; Perri, 2005; Stoffle & Minnis, 2008).

The MNE is at a disadvantage compared to local companies when it comes to mitigating community risks (Gifford & Kestler, 2008; Johanson & Vahlne, 2009). It has little practical knowledge about the local political, social and cultural context and thus needs to learn what is deemed important to the community, and, because of increased efficiency of communication, there can be little time for the MNE to react and mitigate events when risks first materialise. This puts pressure on the mining MNE to implement effective risk management practices that

will reduce the chance that projects could be terminated or significantly changed, as this could increase costs significantly.

One of the places where community risks are dominant is in the mining industry, where the social and environmental impact and changes to CofP are often very noticeable (BSR, 2003; Kemp et al., 2016; Miller & Lassard, 2001). Through multiple case studies in Armenia, where mining operations have been conducted for several centuries, it is possible to gain valuable lessons on the changes that CofP go through and the mechanisms that guide the practices of community risk management. During the Soviet period, mining production was expanded vigorously to recover the union's weak economy after World War II, and today the mining industry continues to be the largest contributor to the Armenian economy (Bond & Levine, 1997). As of 2013, the mining sector had more than 600 operating mines, including 27 base metal mines, which is quite significant in a country of only around 29,000 km² (Investment Guide, 2013). Active MNEs in Armenian mining include nine foreign-owned companies, all involved in metal extraction—e.g., gold, copper-molybdenum, silver and iron. The export of ore is estimated to account for a significant part (around 30 per cent) of the Armenian economy and, according to the Mining Contribution Index (ICMM, 2014; The Economist, 2015), is the country heavily reliant on the industry. The importance of mining makes the MNEs a focus of attention from government officials, politicians, NGOs and a wide range of other stakeholders who have an interest in the impact of mining on Armenian society and especially on CofPs close to mining sites. It is well documented in the literature how these communities are impacted and changed by mining activities (Dana, 2014; Gifford & Kestler, 2008; Kemp & Owen, 2013)—for example, in the form of socioeconomic impacts that occur as a result of community members starting to work at the mine, often at higher wages than the average pay, when the effect of pollution becomes apparent, affecting community members and livestock (Anderson, 2014; Petrosyan et al., 2004), or when the infrastructure of the village or city undergoes changes as the MNE builds or renovates roads, gas pipes and electricity networks (Morris et al., 2012, p. 143).

The social and physical impact of a mining project does not all happen at once but rather in small incremental steps as the project unfolds (Kraemer & van Tulder, 2009; Lynch, 2002). In the initial phases, the changes might be in the form of visits from surveyors and community meetings about the project, while later on, and as the scale of activities expands, the impact becomes more tangible in the form of changes to infrastructure, landscape, economic status and environment. In the initial phases of the project, the impact on the community is small, as there is little or no change to the social and economic life of the community. As the project matures

and activities expand, however, so do the changes that the CofP has to endure, such as long-term health issues and pollution as well as changes to the local social and economic structures.

Given that CofP can pose a potential threat to business continuity, the paper explores the community risk management practices of mining MNEs and asks the question: How is community risk management practised by mining MNEs in Armenia?

We seek to answer the research question through a multiple case study of mining MNEs operating in Armenia, based on desk research, interviews and fieldwork observations. First, the risk management practice is conceptualised through a review of the MNE management literature and the development of a model for community risk management. The model is then used to analyse how mining MNEs in the country manage community risk and the practices they utilise to mitigate this type of uncertainty. Based on the findings, we answer the research question and present a revised model, thereby contributing to the MNE risk management literature with knowledge about community risk management practices.

5.3 Theory: An MNE perspective on community risk

The MNE risk management literature describes three types of uncertainty associated with foreign direct investments, namely financial, political and cultural risks (Feinberg & Gupta, 2009; Gifford & Kestler, 2008; Lundan, 2014, p. 337f; Miller, 1992). Economic uncertainties or financial risks come in the form of currency exchange risks, such as equity market fluctuations, commodity prices and host and home country interest rates (Birt et al., 2013; Christoffersen, 2003, p. 5). Political risks are the arbitrary actions of governments concerning investment projects, including outright expropriation, the seizing of operations, forced contract renegotiations and acts of political violence or regulatory interference (Erb et al. 1996; Simon, 1984). Cultural risks originate from differences in an MNE's perception of its decisions and that of its stakeholders, which impacts historical, religious, social or cultural norms (Franks & Cohen, 2012; Graetz & Franks, 2015; Kemp & Owen, 2013; Lodh & Nandy, 2008). For these types of risk to emerge, a certain level of formalisation needs to be reached that can actually subject the MNE to risk—for example, political risks will emerge only when political actors are involved and financial risks when doubts emerge among lenders and investors about the MNEs ability to fulfil its financial commitments (Bekaert et al., 2014; Boddewyn & Brewer, 1994; Erb et al., 1996). In order for communities to pose a risk, they therefore need to apply their resources in such a way that it subjects the MNE to a risk that is perceived as real. CofPs might not have this formalisation, as the community is too small in numbers or has too few resources available

to it to pose a credible risk. It is therefore possible that risks from CofPs arise when they partner with other organisations that have a higher level of formalisation, as when the CofP is represented by NGOs, the media, politicians or religious representatives (BSR, 2003; ICMM, 2015). These organisations can make claims on behalf of the community and thereby engender community risks that can elicit responses from financial, political and cultural actors. Examples of these types of risks materialising can be seen in multiple case studies from all over the world from the impact of extractives project development in Canada (Dana et al., 2009; Kadenic, 2015) to small-scale mining in sub-Saharan Africa (Hilson & McQuilken, 2014; Nyame & Grant, 2014) and sometimes a troublesome relationship with aboriginals in Australia (Cheshire, 2010; O’Fairchellaigh, 2003). However, as the number of stakeholders and possible different financial, political and cultural risks increase, so does the complexity the MNE faces. It is therefore in the interests of the MNE to identify community risks at an early stage and, if possible, before this formalisation takes place, in order to initiate mitigation efforts that will, for example, prevent governmental intervention (political risk), lead to loss of the social licence to operate (cultural risk) or cause investors to increase interest rates or make other demands that affect cost structures (financial risk).

The MNE is at a unique disadvantage when it comes to managing its CofP risks. MNEs are subjected to liability of outsidership and internationalisation itself, involving a process of timely and incremental learning processes, being an outsider to the national and cultural context (Johanson & Vahlne, 2009; Selmier et al., 2015; Zaheer, 1995). Over time, the firm becomes more knowledgeable about the local conditions and how to handle the CofP in the areas where it operates, but this process takes time and requires resources. However, with access to communication technologies and increased interest from both investors and political and cultural actors, this time is not necessarily available to the MNE. The complex environment means that MNEs are simultaneously in the process of learning about their community impact, which requires an in-situ presence, and having to make decisions that undoubtedly will affect the community of place. With the aim of handling this continuous process, the organisation tries to learn from other similar MNEs by mimicking or copying their risk management systems in the hope that this will stimulate its learning process (DiMaggio & Powell, 1983)—for example, in the form of stakeholder engagement or corporate social responsibility programmes (Park et al., 2014; Selmier et al., 2015; Tatoglu, et al., 2013). By using such systems, the MNE structures its approach in line with recognised international standards as well as increases the speed at

which knowledge is acquired about its impact as a result of inconsistencies between the performance of the MNE and the expectations of salient stakeholder groups.

Community risk is conceptualised by considering the uncertainties arising from these actors as risks that lack the structure and formalisation that traditional risk management systems are designed to identify. To understand community risks, we draw on a sociological understanding of the tension between certainty and uncertainty, or the known and unknown, as the actors perceive it (Burgess, 2015; Power, 2004, 2007). Perceived risk expands the notion of the social and physical environments as complex systems that provide risk managers and stakeholders with different representations of what is real—i.e., what constitutes risk and what does not. This perception of risk is thus considered as part of how individual community members make sense of the uncertainties that come from changes in their environment and the actions that they take to mitigate these. Hence, community risk stems from how these actions can possibly influence business continuity.

This conceptualisation of community risk comes with several implications. It enables different perceptions of the same event, as differences arise between how actions taken by the MNE and the CoFP should be interpreted. And this can give rise to actions by the CoFP that are not necessarily founded on objectively observable facts but rather on their interpretation of changes and events in their social and physical environment (Canabal & White, 2008; Graetz & Franks, 2015; Missens et al., 2007; Prno & Slocombe, 2014). Furthermore, for the CoFP to pose a risk to the MNE, it needs to take some form of action (invest its resources) in such a way that it poses a possible threat to the MNE. The resources can come from the CoFP itself, or the MNE can draw on the resources from CofIs and, hence, pose financial, political or cultural risks to the MNE. The concept of community risk management is therefore defined as the ability of the MNE to identify community perceptions and implement practices that enable them to gain the acceptance of the CoFP. Community risks do not need to originate from a physical change in the local environment but could potentially have their roots in the aspirations and the expectations the community has of corporate behaviour.

A review of the MNE risk management literature and the conceptualisation of community risk outline the basis of a model describing community risk management as practised by mining MNEs. The model (Figure 6) consists of four elements: the mining MNE, risks, CoFP and CofI. The model describes the mining MNE as an organisation that can be subject to risk in the form of financial, political and cultural uncertainties and that controls these risks through its risk management practices. The uncertainties and risk originate from CoFP, which can utilise its

resources and therefore subject the MNE to risks, either directly or by partnering with CofI. What remains unknown is what the risk management practices of the mining MNE are, how communities apply their resources and the relationship between CofP and CofI.

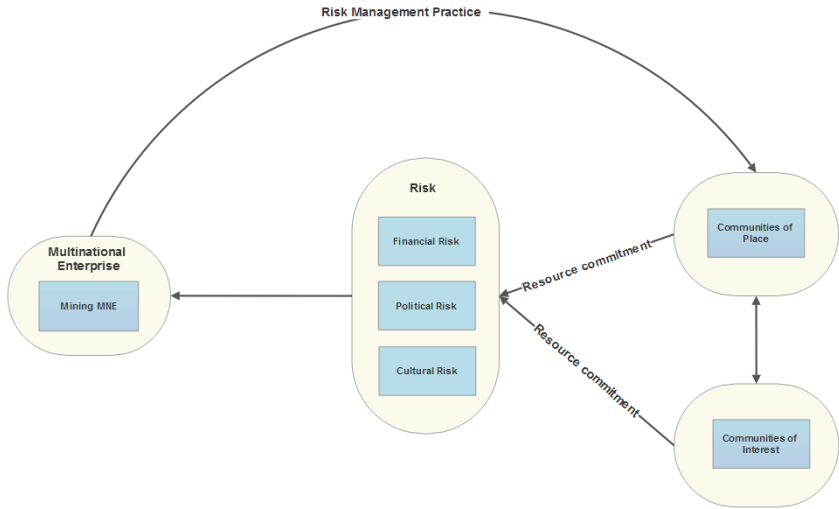


Figure 6. Model MNE risk management based on the literature

5.4 Method

The research is carried out as a multiple case study (Eisenhardt, 1989; Yin, 1994) of the Armenian mining industry, which includes all the mining MNEs that are currently active in Armenia. The multiple case study is used to provide an analytical depth that is needed when testing mining MNE community risk management practices and resource commitment of CofP and CofI. The case study approach follows similar research designs, where investigations have been made into the relationship between communities and business enterprises within the extractive industry (Dana et al., 2009; Graetz & Franks, 2015; Nyame & Grant, 2014). The choice of method was based on a review of research methods carried out on the mining industry and community relations in other places of the world, where interviews and field observations were the primary source of empirical evidence (For example, see Anderson, 2014; Cheshire, 2010; Dana & Anderson, 2014; Davis & Franks, 2014; Horowitz, 2010; Kemp & Owen, 2013).

We chose to approach the research through a deductive design where a pre-defined theoretical framework is developed by a review of the relevant literature and subsequently tested through observations and interviews (Dana & Dana, 2005; Dana & Dumez, 2015). Hence, we used the literature review to construct a model, described above, which subsequently could be tested in the field through interviews and fieldwork observations. Firstly, an initial desk screening was conducted that revealed the individual mining MNEs' home country ownership, the type of exploration, the location and presence of nearby communities and the number of years the mine had been active. This process included publicly available information from corporate websites, newspapers and annual reports (see Table 9). Based on this information, 14 exploratory interviews were conducted a year before the study to ensure that we had access to mining MNEs and villages affected by mining activities as well as to refine the final interview guide.

Table 9. Cases of mining MNE and Coff

Multinational Enterprise (MNE)	Home Country	Exploration	Villages and Towns	Age of Mining Site
Vallex Mining	Cyprus	Copper/Molybdenum	Teghut, Shnogh	1 year
Lydian International	Canada	Gold	Vayots Dzor, Saravan and Gndevaz	0 years
Cronimet	Germany	Copper/Molybdenum	Kajaran	25+ years
Dundee Precious Metals	Canada	Gold	Kapan	25+ years
Fortune Oil	China	Iron	Hrazdan	0 years
Global Gold	United States of America	Gold	Marjan, Toukhmanuk and Getik	10+ years
GeoProMining	Russia	Copper/Molybdenum Gold	Agarak Ararat	25+ years
Orogen	United Kingdom	Gold	Mutsk	5 years
Unity Gold	Ireland	Gold	Vayk	25+ years

Secondly, following the initial screening and explorative interviews were formal interviews conducted at five of the mining sites and 13 villages, which included representatives from CofP, MNE managers. Interviews were also carried out with representatives from CofI and investors situated in the capital, Yerevan, totalling 36 individual interviews. All interviews were semi-structured to allow for new information to come forward, which the initial screening of the literature and explorative interviews had not unveiled. Hence, the final interview guide related to MNE risk management and well-known consequences of mining on CofP, along with input from the initial exploratory interviews. The questions were organised thematically under culture and society, economics, environment, politics and governance, and the process of change itself as major themes identified in the literature. All interviews were transcribed to compare respondents answering the same questions. The data were coded by themes and sub-themes (Flick, 2009), corresponding to the way that respondents perceived how the mining MNE's activities affected the CofP. This methodological approach made it possible to identify causal powers that determined how mining MNEs and CofPs perceived a project's impact on the community as well as facilitating a detailed understanding of how the mining project had influenced the social dynamics of the CofP, economic development, effects of pollution, local politics and the management of community grievances.

In order to understand community risk management practice, we identified mechanisms that determined mining MNEs' decisions impacting the CofP and how these communities came to make decisions that could affect the mining MNEs' business continuity. Mechanisms are defined as plausible explanations (causal powers) for how changes in the social and physical world occur (Archer, 2010; Elder-Vass, 2010, p. 43)—in this instance, mining MNEs' community risk management practices and the resource commitment of communities. This critical realist stance allows for the observation of objectively identifiable facts about the world around us but also that people can have a different perception of these. Thereby, it is possible to observe both the decision-making process as well as concrete actions taken, by all the actors that contribute to increases or decreases in community risk. The research is in this way focused on identifying risks to the MNE that stem from the actions of CofP and CofI, with the understanding that it is not necessarily the objectively identifiable facts that cause communities to act but possibly a combination of different social and physical factors. Rather, it is the perception of the danger they are in and their subsequent decision to take actions on this perception that determine the level of threat to business continuity.

By using the same interview guide in all interviews and asking the same questions to CofP, CofI and representatives of the mining MNE, it was possible to compare responses; we were thereby able to identify differences in perceptions of how a given impact had been perceived by all involved. If the impact had materialised as a risk to MNE business continuity within any of the three risk types identified in the literature review (financial, political or cultural), it was characterised as a community risk event. If the possible risk event did not materialise, despite being impacted by the MNE, we investigated whether the CofP had declined to utilise its resources to affect business continuity and, thereby, in reality had accepted the negative impact of the mining project and, conversely, whether it had taken active steps against CofIs opposing the mining project, with the aim of disrupting the possible influence of civil society actors on the project. In this case, the result was interpreted as the CofP took the side of the mining project and deemed its impact as more positive than negative on the development of the CofP.

Beginning with the model and the theoretical review, there are four different outcomes when mining MNE activities impact CofP (summarised in Table 10 below). The four-by-four matrix is organised as follows: the axis on the left describes the CofP as either active (investing its own resources) or passive (not investing its own resources), while the top axis describes community risks as being increased or decreased. Community risks can be increased if the CofP commits its own resources and thereby poses a risk to the MNE (first quadrant), or it can partner with CofI, which then commits its own resources (second quadrant). Both situations would result in the possible realisation of risk, as resources are committed and aimed at triggering a response from financial, political or cultural actors. Community risk is decreased when the CofP either supports the mining MNE against the resource commitment of CofI (third quadrant) or accepts the impact of mining on the community (fourth quadrant). The CofI can choose to commit its resources against the MNE, but it would in this case be without the support of CofP, and hence, there is no community risk.

Table 10. Mining MNE impact on communities of place

		Community risk increased	Community risk decreased
Mining MNE impact on communities of	CofP as active	(1) CofP commits resources	(3) CofP supports the mining MNE against

place			the CofI
	CofP as passive	(2) CofP partners with CofI, which then commits resources	(4) CofP accepts the impact

5.5 Community risk - Mining MNE impact on communities of place

The following is an account of the findings uncovered through fieldwork and interviews with CofP, MNE managers, CofI and investors. The section is organised as per the two-by-two matrix described above and discussed to illustrate each of the quadrants, in turn given examples from mining MNEs operating in Armenia.

CofP commits resources. It was claimed that a member of the Teghut CofP was beaten up by corporate security staff from the Vallex Group MNE, because he had raised dust by careless driving, something the local villagers claimed the company did all the time. As a result, the villagers blockaded the road to the mine, thereby hindering employees, usually transported to the site on buses, from getting to work. The people of Teghut wanted the mayor and regional governor to intervene and ensure local justice by making the MNE security staff change their behaviour and reduce the level of dust to which the community was subjected: “It is not enough that they [company's representatives] keep us in [mining] dust the whole time, and we do not say anything. One good man accidently raised dust, and they caught our villagers and beat them in the centre of the village.” (Interview Teghut, 2015). The event further evolved into a blockade, thereby escalating the incident. “Since early morning, residents of Teghut have blocked the road, and the workers, who come from nearby villages to work there, could not manage to enter the territory.” (Ibid) The village head of Teghut got involved, criticising the Vallex Group for using force, beating up community members and not being able to resolve the issue peacefully, saying, “Vallex implemented rude power and forced the local villagers to settle the demonstration.” (Ibid). The case illustrates how the CofP commits resources with the aim of applying pressure to the mining MNE, calling for the intervention of regional and national politicians by preventing the continued operation of the mine. The risk mitigation response from the mining MNE is, in this instance, to use force and thereby retain business continuity that otherwise would have been disrupted.

CofP partners with CofI. Kajaran, a town in the southern part of the country, had been affected by mining since the Soviet era and was less reluctant to engage the company, directly

naming the mining MNE “Cronimet, the aorta of Kajaran” (Interview Kajaran, 2015), even though the mayor acknowledged that the impact of having mining activities in the centre of the city caused “specific mining related diseases [...] as a result, there would be vivid changes in the genes for generations.” Acknowledging that the negative impact was salient, there was awareness that the city, at this time, was reliant on the mine, where 80 per cent of the population worked. Kajaran, being almost exclusively reliant on the mine, made the CofP less inclined to commit its own resources to raising risks for the mining MNE. However, by partnering with CofI and thereby utilising their resources, the CofP was less vulnerable and exposed, should the mining MNE decide to retaliate. In this case, the Pan-Armenian Environmental Front, under the headline “Armenia’s breaking backbone”, launched a campaign against the mine in Kajaran and against the firm, Cronimet, which highlighted a series of environmental and social impacts (Pan-Armenian Environmental Front, 2014). The use of organisational resources from PAEF resulted in significant attention from national and diaspora groups, who were able to persuade the company to improve its social and environmental performance, making the MNE state that “Cronimet’s environmental policy is designed to meet high standards as a prerequisite for carrying on business in a sustainable society and the protection of life, health and the environment”. As the mayor of Kajaran (Interview Kajaran, 2015) later stated: “the work at [the mine] is hazardous; therefore, people are getting additional privileges for performing certain works, for example, it was stated in the law: the dusty, underground works were dangerous for health and resulting in cardiopulmonary arrest, silicosis disease. There are employees in Cronimet who are getting special food, bonuses to salaries, retirement benefits.” While the CofP was reluctant to commit its own resources against the MNE, it benefitted from partnering with the CofI, in this case improving conditions for mine workers.

CofP supports the project against the CofI. The town of Ararat hosts the extraction plant for the GeoProMining (GPM) gold mining project located in Zod, a few hundred kilometres away. The town is impacted by the dust raised when crushing ore and by the chemicals used in the process of extracting gold. The CofP has witnessed the negative impact associated with having the plant in close proximity to where they live and could easily identify areas where they felt a direct influence. For example, on the health condition brought on by mining pollution:

The birds were sitting on polluted water and dying: most probably that was conditioned by the heavy metals, which had a very negative impact on health. Tumours are a widely spread disease in Ararat village. It had a massive spread and

there were cancer cases detected involving one, three, six-year-old children. In Ararat village, the health diagnosis of the residents would be an even higher amount of health deterioration and many of GPM's employees couldn't have children as a result of the company's activities. The absence of proper cleaning procedures of toxic substances affected generations. Especially during recent years, the negative impact had increased (Interview Ararat, 2015).

At the same time, the communities realised the interconnectedness with the plant and, to some extent, regarded their faith as a community to be intertwined: "From economical perspectives, the company had a comparably higher positive impact on the community, since the company hired around 80 to 100 employees from Ararat village. If the Zod factory was closed, 100 families would be unemployed" (Interview Ararat, 2015). However, being heavily impacted by mining operations does not necessarily mean that CofPs welcome CofIs to represent them, as from another villager: "the citizens of Yerevan have no idea of village life" (Interview Ararat, 2015). Villagers were hesitant to demonstrate their resistance to the mining project too openly or to be seen as partnering with CofI. One thought that there should be "big demonstrations [by NGO] against the construction of processing facilities in the territory of tailings, but in fact nothing happened" (Interview Ararat, 2015). One of the CofIs also witnessed being asked to leave some of the villages in which they had been protesting as CofP became increasingly hostile. This was possible, because these villages stood to lose much if the CofI was actually successful in ending the mining project. One of the interviewees was working as a teacher in the local school, and she remembered earning a 7,000-AMD monthly net salary, while current teachers' monthly net salary was 70,000 AMD: consequently, their salaries had increased tenfold (Interview Ararat, 2015).

CofP accepts the impact. The incident with dust pollution in the village of Teghut escalated, and national media got involved under the headline "Teghut mine security beat up local villagers: Residents block road in protest" (Paremuzyan, 2012), and two national environmental NGOs, Ecolur and Save Teghut (CofI), called for political interference. The two committed resources that expanded and escalated the issue to include the event in the village and also the legal basis on which the mine operated, questioning the validity of their environmental assessment report. At this point, the conflict with the CofP in Teghut was resolved:

“Two times the villagers were against the company. There is strong community coherence and on these two occasions the villagers closed the road. The people of the company were violent. The region head came with the police, and they discussed the issue, creating a solution that they found satisfactory” (Interview Teghut, 2015).

However, CofI continued to commit resources but without the support and resources of the CofP, making claims against the Vallex Group for not creating a comprehensive environmental assessment report, violating numerous environmental regulations and the rights of CofP members. The CofI claimed: “People from Teghut can’t even go to their sanctuary place [a small religious site inside the mine area]; they can’t even access this place. This is especially important to the people from this village as they relate to the trees and identify with nature” (Interview Save Teghut, 2016). However, without the CofP either actively supporting or partnering with the CofI, financial, political or cultural stakeholders were inclined not to get involved in the issue, as expressed by one NGO: “If the activists do not do anything, they don’t protest” (Interview Save Teghut, 2016). And as stated by the CEO of PensionDanmark, one of the major investors in the Teghut project: “We are naturally delighted to be able to enter into this agreement, which will increase Danish exports [...] a project that is setting new standards for mining in Armenia” (PensionDanmark, 2013). While there were more attempts by the CofI to raise political and cultural risks, none of these to date has been realised.

In summary, the CofP stands to gain significantly from being geographically close to a mining project in the form of jobs, higher income, improved living standards and access to different forms of welfare facility. As the communities increasingly become aware of the negative consequences that the mining project has on health, safety and socioeconomic development, they realise that, despite these notable drawbacks, their future economic welfare depends on the existence of the mine. Hence, they do not commit resources at a level that could endanger the project so that the MNE would be forced to take any serious mitigating action.

5.6 Risk management practices as allocation of resources

The mining MNE’s risk management practice is centred on ensuring that CofPs does not commit resources themselves or partner with CofIs, which can result in the creation of financial, political or cultural risks. The mining MNE can make the community less inclined to commit these resources by making them either directly or indirectly reliant on their investment through

the creation of jobs or local socioeconomic development, as seen in both Ararat and Kajaran. When, at a later stage, the negative effects of mining activities become evident, and the members of the community of place start to experience health issues, or the local environment starts to suffer, the perceived cost of terminating the project becomes too high, even to a degree where CofP, despite severe environmental problems, supports the continuation of the mining project against CofI.

The mining MNEs' risk management practice also reflects this pattern, as resources to the CofP are more salient in the explorative or early production phases of the project. Here, we found that the MNE primarily allocated resources in the initial phases of the project, when most of the physical changes were still in the planning or early construction phases. For example, when the Vallex Group's mine was still in the planning and construction phase, "the company conducted quarterly meetings and discussions with the members of the community" (Interview Teghut, 2014); and, from the MNE side, "consultation started at a very early stage, eight years before construction when it was just a draft impact assessment, and when the project went into the development stage we had several stakeholder meetings" (Interview Vallex, 2016). For other projects that were yet to go into production, there were also frequent consultations with CofI, even very critical ones who did not support mining in the country at all.

The NGOs here are extremely aggressive, and they are more considered as activists than anything else. The greatest example is that the day before yesterday we had a meeting organised by NGOs and one of them stood up and said that if I knew that Lydian International was here, I would not have come (Interview Vallex, 2016).

For these mining MNEs, it was imperative that their communication was perceived as open and transparent, and one of the ways this could be achieved was to be present and visible in the public arena. This type of community engagement project took on different forms, ranging from philanthropy directed at sports events and scholarships for universities to building infrastructure and renovating public buildings. For example, in Teghut, where the mine is in the early stages of production, "the renovation of roads, the quality of electricity and telecommunication improved due to the financial support of Vallex Mining" (Interview Teghut, 2016), and in Shnogh, another town some five kilometres away from the same mine, "the company renovated the internal and external water lines and sponsored the establishment of the

local dance group, repaired the water network—the network hadn't been serviced for a long time—and they built the water irrigation system” (Interview Shnogh, 2016). The mining executives confirmed that their companies allocated funds for different community development projects: “We built the gas pipeline and improved the irrigation system. Therefore, infrastructure and access wise, they were better off” (Interview Vallex, 2016).

Mining MNEs, who had been operating for some time, communicated less in the public sphere and prioritised their efforts at targeting specific stakeholders, such as village heads and government officials. For example, in Kajaran, where the mayor is the primary source of information to and from the MNE (Cronimet) “since the company started its operations in 2006, at that time, there had been conducted both public hearings and meetings with community members” (Interview Kajaran, 2015). As time progressed, however, the meetings became less frequent, and an increasing number of decisions were cleared between the mayor and the mining MNE before any announcements. “During city council meetings, the company administration mandatorily discussed and agreed on some questions with the mayor of Kajaran city” (Interview Kajaran, 2015), indicating that most, if not all, major issues were resolved before the public hearings took place. When visiting Ararat village, where a gold extraction plant is located in central Armenia, a village head claimed that “in 2012, GPM Gold Company promised to provide a bus to Ararat village, but since then nothing had been provided.” (Interview Ararat, 2015) He further explained how the relationship had deteriorated:

The emission cleaning procedure has been poorly performed during recent years; during Soviet times, there was high consistency and tonnes of bleach were used to clean and neutralise the cyanide ingredient used in gold production. But currently the company is owned by a foreign organisation, and they have neglected the proper cleaning processes (Interview Ararat, 2015).

According to the villagers, this has resulted in sterile employee practices, sick children and cases of heavy metal poisoning, which the MNE has ignored. The MNE's engagement with the community has been very limited, and investments seem to be going slower, following their belief that “GPM didn't provide significant support and several times the municipality applied to the company, but didn't receive any help” (Interview Ararat, 2015).

The MNE's allocation of communicative and physical resources aimed at the CofP follows a pattern where engagement is high in the initial phases (exploration and early

production) but is then significantly scaled down as the project matures. As the examples used here show, both Vallex and Lydian International had invested in projects that directly affected the CofP in their area, while companies like GeoProMining and Cronimet had significantly scaled down both investments and consultations.

5.7 Conclusions and discussion

This paper has analysed how community risk management is practised by mining MNEs in Armenia. We conceptualised communities as CofPs, consisting of villages and towns geographically close to the mining MNEs' activities, and CofIs as outsiders, like NGOs and other civil society organisations that have an interest in mining operations. We analysed community risk as materialising through the allocation of resources from the CofP, either alone or in partnership with CofI, which in both cases aimed at motivating financial, political or cultural actors to take actions that influence business continuity.

We found that community risk management is practised by the mining MNEs through allocation of both communicative and physical resources towards the CofP. This can be done through community consultations and town hall meetings as well as physical investments in infrastructure, kindergartens or other services. We argue that the response from a community risk perspective can fall within four domains. Community risk can materialise if CofP commits its own resources or forms a partnership with a CofI that then commits its resources, in both cases, directed towards financial, political or cultural actors. Community risk is, in both cases, increased, as decisions to apply resources intensify risks to the mining MNE. When a CofP supports the mining project against the CofI, or when a CofP remains passive despite the impact of the mining project, the risk management practices of the mining MNE are successful in decreasing community risk.

However, we found a difference in the effect of the resource allocation between CofP and CofI when it came to their ability to initiate actions from financial, political and cultural actors. When CofPs committed resources alone, they seemed unable to activate actors outside their geographical region; while their claims were valid, it was only when they partnered with the CofI that the mining MNE took action to mitigate risk. While the CofP and its specific grievance with the mining MNE was more marginalised when engaging in this partnership, it created more awareness in wider circles of the challenges that were faced. We therefore find that mining MNE community risk management practice targets CofP, with the aim of preventing

them from partnering with CofI, who have the resources to activate financial, political and cultural actors that are perceived as posing a higher risk to business continuity. This finding is further supported by our analysis of instances where the community was either passive, thereby accepting the impact that the mine had on the community, or when they actively opposed CofI in interfering in the relationship despite very severe impacts from the local mine. While the CofI could commit resources that raised risks without the support of the CofP, their argument would have less legitimacy with the aforementioned actors and thus possibly less success in changing mining MNE behaviour.

This risk management practice of preventing CofPs from partnering with CofI or encouraging them to remain passive was further substantiated. We found that, in the exploration or early stages of production, mining MNEs communicated more frequently and invested more, while, as the project matured, these activities were scaled back significantly. However, while we thought that the resource commitment of the mining MNE and the level of community risk would be proportional; this did not seem to be the case. Our interpretation is that, as time passes, the CofP becomes increasingly reliant on the jobs being created, the infrastructure and institutions being supported, like roads, and educational facilities or scholarships, and while these are scaled back, it does not significantly reduce the risk that it will commit resources against the mining MNE and, in some cases, even support the project against outside interference. These findings are in-line with other research that finds that communities recognise the short-term advantages that come with these types of projects and the increase in jobs, as well as access to basic welfare benefits but also that these come with a trade-off in the form of increases in crime and disruption of family patterns (Dana et al., 2009; Horowitz, 2010; Prno & Slocombe, 2014). This understanding of mining MNE risk management practice was further substantiated by the finding that CofI did not play a significant role in the allocation of mining MNE resources. Rather, these groups were, to a large extent, ignored when it came to communication, aside from invitations to stakeholder consultation meetings. Underlined by the aforementioned statement from the CEO of Lydian International that described them as more of a nuisance than an actual threat, the literature nevertheless places NGOs and civil society actors as key stakeholders when it comes to risk management. We interpret the lack of focus on CofI as an indication that the MNE knew from previous experiences that, by following a CofP-focused risk management practice, these diverse and possibly more complex stakeholders could be largely ignored.

5.8 Revised model

The findings and conclusions have prompted a smaller revision the initial model (Figure 7). The new model adds and revises two elements, namely time, when it comes to resource allocation, and the role of CofI.

Firstly, the element of time was originally thought to be a major factor in reducing liability of outsidership, as it allowed the MNE to learn how to navigate in the local market. However, the MNE did not focus on acquiring knowledge about the local culture, customs or other unique characteristics in the local context. The risk management practice focused on committing resources to meet generic local demands, such as access to basic services and improvements to local institutions, neither of which was specifically tailored to the local context. For the mining MNEs, this carried with it several advantages: it did not have to allocate resources to building new capabilities, which might not be transferable to another setting, and it could focus on activities that were of direct benefit to its own operations: for example, it could invest in infrastructures, like new roads, gasification and electricity, which would be required when the mine was constructed, and investments in kindergartens and schools would ensure that there would be access to the local workforce. Furthermore, as the project matured, it was possible for the mining MNE to scale down some of these activities significantly without being subjected to community risk. This was due to the reliance of the CofP on some of these generic services that, even though they became very marginal, sustained the community's economic and cultural life. The model was thus changed to reflect the limited resources that the community of place could commit to expose the mining MNE to financial, political and cultural risks (illustrated by a dotted line).

The second change to the model was in the role of CofIs, who were believed to be a significant stakeholder group, as they could expose the mining MNE to financial, political and cultural risks and had the resources to do so. If the CofP and CofI partnered, by lending legitimacy to the CofI when committing resources that exposed the mining MNE to risk. This was also evident in the analysis, as CofI were largely ignored, with a few expectations, when it came to communication and public engagement activities. Collaboration between the two community groups could pose a significant and resource-intensive risk, which can explain why the efforts of the MNEs focus on preventing CofPs from forming partnerships with CofIs. In this way, the objective of mining MNEs' risk management practice is to reduce community risk by committing resources to the CofP for as long as there is a possibility that they might form

lasting partnerships with CofI. An arrow in the revised model illustrates the existence of a partnership between the two.

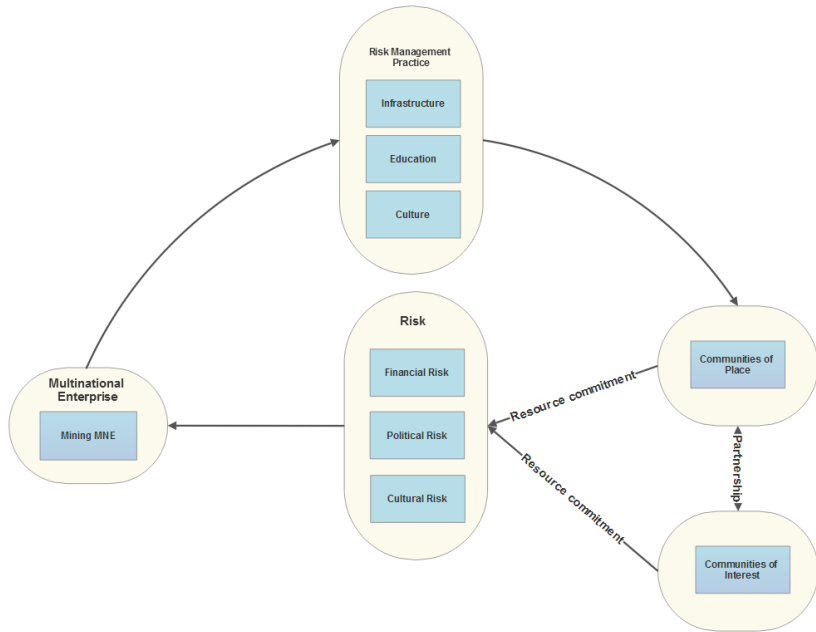


Figure 7. Revised model of MNE community risk management based on findings

5.9 Contribution

The contribution of this paper is threefold. Firstly, it contributes to the MNE risk management literature by highlighting the importance of CofP in risk management practice. The MNE risk management literature has traditionally investigated uncertainties on a national or regional level, which fails to provide valuable insights into how risk management is practised on a CofP level. By conceptualising community risk as a unique source of risk that, if left unmanaged, can evolve into financial, political and/or cultural risks, the latter gains importance when it comes to understanding the early warning signs of emerging uncertainties.

Secondly, the paper contributes by differentiating between CofP and CofI as sources of risk, in contrast to the MNE risk management literature that does not differentiate between the two groups. By focusing on CofPs, which are impacted on a daily basis but have few resources

available to them, and CofIs, which have a clear objective of creating uncertainty and have resources, it is possible to understand how the relationship between the two groups can affect community risk exposure. CofP can be both a threat and a resource that the MNE can use in its risk management practice for mitigation purposes. Finally, the paper emphasises the importance of time in how the MNE's relationship with the CofP evolves, which has previously been largely neglected. While time was not part of the initial scope of the paper, its role is an important finding in that MNE risk management practice varies as the relationship between the MNE and community of place matures, prompting more research into how the passage of time in the relationship can affect overall risk exposure, especially when it comes to an industry like mining, where the impact on the community of place increases over the project lifespan.

5.10 References

- Anderson, C. (2014). Mining and the fall and rise of poverty in southern West Virginia. *The Extractive Industries and Society*, 1, 2–3.
- Archer, M. (2010). Routine, reflexivity, and realism. *Sociological Theory*, 28(3), 272–303.
- Bebbington, A., Hinojosa, L., Bebbington, D. H., Burneo, M. L., & Warnaars, X. (2008). Contention and ambiguity: Mining and the possibilities of development. *Development and Change*, 39(6), 887-914.
- Bekaert, G., Harvey, C. R., Lundblad, C. T., & Siegel, S. (2014). Political risks spread. *Journal of International Business Studies*, 45, 471-483.
- Birt, J., Rankin, M., & Song, C. L. (2013). Derivatives use and financial instrument disclosure in the extractives industry. *Accounting and Finance*, 53, 55-83.
- Boddeyn, J. J., & Brewer, T. L. (1994). International-business political behaviour: New theoretical directions. *Academy of Management Review*, 19(1), 119–143.
- Bond, A. R., & Levine, R. M. (1997). Development of the copper and molybdenum industries and the Armenian economy. *Post-Soviet Geography and Economics*, 38(2), 105–120.
- Burgess, A. (2015). *Social construction of Risk in The SAGE Handbook of Risk Communication*. SAGE Publications, Inc., Thousands Oaks.
- Business for Social Responsibility (BSR) (2003). *The social license to operate*. Retrieved from: http://www.sdsg.org/wp-content/uploads/2013/04/file_BSR_Social_License_to_Operate.pdf
- Calvano, L. (2008). Multinational corporations and local communities: A critical analysis of conflict. *Journal of Business Ethics*, 82, 793–805.
- Canabal, A., & White, G. O. (2008). Entry mode research: Past and future. *International Business Review*, 17, 267–284.
- Christoffersen, P. (2003). *Elements of financial risk management*. Oxford: Elsevier Science.
- Cheshire, L. (2010). A corporate responsibility? The constitution of fly-in, fly-out mining companies as governance partners in remote, mine-affected localities. *Journal of Rural Studies*, 26, 12-20.
- Dana, L-P., Anderson, R. B., & Meis-Mason, A. (2009) A study of the impact of oil and gas development on the Dene First Nations of the Sahtu (Great Bear Lake) Region of the Canadian Northwest Territories (NWT). *Journal of Enterprising Communities: People and Places in the Global Economy*, 3(1), 94-117.

- Dana, L-P., & Anderson, R. B. (2014). Mining and communities in the Arctic: Lessons from Bake Lake, Canada. *International Journal Entrepreneurship and Small Business*, 22(3), 343-361.
- Dana, L-P- & Dana, T. E. (2005). Expanding the scope of methodologies used in entrepreneurship research. *International Journal Entrepreneurship and Small Business*, 2(1), 79-88.
- Dana, L-P. & Demuz, H. (2015). Qualitative research revisited: Epistemology of a comprehensive approach. *International Journal Entrepreneurship and Small Business*, 26(2), 155-170.
- Dana, L-P., Mason A. M, & Anderson R. B. (2009). A study of enterprise in Rankin Inlet, Nunavut: Where subsistence self-employment meets formal entrepreneurship, *International Journal Entrepreneurship and Small Business*, 7(1), 1-23.
- Davis, R., & Franks, D. M. (2014). Costs of company-community conflict in the extractive sector. *Corporate Social Responsibility Initiative Report No. 66*. Cambridge, MA: Harvard Kennedy School.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. *American Sociological Review*, 48(2), 147–160.
- Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532–550.
- Elder-Vass, D. (2010). *The causal power of social structures*. Cambridge: Cambridge University Press, UK.
- Erb, C. B., Harvey, C. R. & Viskanta, T. E. (1996). Political risk, economic risk, and financial risk. *Financial Analyst Journal*, November/December:29-46.
- Feinberg, S. E., & Gupta, A. K. (2009). MNC subsidiaries and country risk: Internalisation as a safeguard against weak external institutions. *Academy of Management Journal*, 52(2), 381–399.
- Figueira-de-Lemos, F., Johanson, J., & Vahlne, J. (2011). Risk management in the internationalisation process of the firm: A note on the Uppsala model. *Journal of World Business*, 46(2), 143–153.
- Flick, U. (2009). *An introduction to qualitative methods* (4th edition). London: Sage.

- Franks, D. M., & Cohen, T. (2012). Social license in design: Constructive technology assessment within research and development institution. *Technological Forecasting & Social Change*, 79, 1229–1240.
- Franks, D. M., Davis, R., Bebbington, A. J., Ali, S. H., Kemp, D., & Scurrah, M. (2014). Conflicts translate environmental and social risk into business costs. *PNAS*, 111(21), 7576–7581.
- Ghoshal, S. (1987). Global strategy: An organizing framework. *Strategic Management Journal*, 8, 425–440.
- Gifford, B., & Kestler, A. (2008). Towards a theory of local legitimacy by MNEs in developing nations: Newmont mining and health sustainable development in Peru. *Journal of International Management*, 14, 340–352.
- Graetz, G., & Franks, D. M. (2015). Conceptualising social risk and business risk associated with private sector development projects. *Journal of Risk Research*, 19(5), 581–607.
- Hagigi, M., & Sivakumar, K. (2009). Managing diverse risks: An integrated framework. *Journal of International Management*, 15, 286–295.
- Hilson, G. & McQuilken, J. (2014). Four decades of support for artisanal and small-scale mining in sub-Saharan Africa: A critical review. *The Extractive Industries and Society*, 1, 104-118.
- Holterman, D. (2014). The biopolitical war for life: Extractivism and the Ugandan oil state. *The Extractives and Society*, 1, 28-37.
- Horowitz, L. S. (2010). ‘Twenty years is yesterday’: Science, multinational mining, and the political ecology of trust in New Caledonia. *Geoforum*, 41, 617–626.
- International Council on Mining & Metals (ICMM) (2014). *Oxford policy management*. Retrieved from: <http://www.icmm.com/national-economies>
- International Council on Mining & Metals (ICMM) (2015). *Indigenous people and mining* (2nd edition). London: International Council on Mining and Metals Raw Materials Group.
- Investment Guide. (2013). *Investment guide: Armenia 2013*. Armenia: The Ministry of Economy of the Republic of Armenia.
- Johanson, J., & Vahlne, J. E. (2009). The Uppsala internationalisation process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431.

- Kadicic, M. D. (2015). Socioeconomic value creation and the role of local participation in large-scale mining projects in the Arctic. *The Extractive Industries and Society*, 2, 562-571.
- Kemp, D., & Owen, J. R. (2013). Community relations and mining: Core to business but not 'core business'. *Resource Policy*, 38, 523–531.
- Kemp, D., Worden, S., & Owen, J. R. (2016). Differentiated social risk: Rebound dynamics and sustainability performance in mining. *Resource Policy*, 50, 19–26.
- Kraemer, R., & van Tulder, R. (2009). Internationalization of TNCs from the extractive industries: A literature review. *Transnational Corporation*, 18(1), 137–156.
- Lodh, S., & Nandy, M. (2008). Exploring country risk: MNCs mindset. *The ICAFI Journal of International Business*, 3(2), 24–35.
- Lundan, S. (2014). *Transnational corporations and transnational governance: The cost of crossing borders in the global economy*. New York: Palgrave Macmillan.
- Lynch, M. (2002). *Mining in world history*. London: Reaktion Books.
- Miller, K. D. (1992). A framework for integrated risk management in international business. *Journal of International Business Studies*, 23(2), 311–331.
- Miller, R. & Lessard, D. (2001). Understanding and managing risks in large engineering projects. *Int.J.Proj.Manag.*19,437–443.
- Missens, R., Dana L-P. & Anderson, R. (2007). Aboriginal partnerships in Canada: Focus on the Diavik Diamond Mine. *Journal of Enterprising Communities: People and Places in the Global Economy*, 1(1), 54-76.
- Morris, M., Kaplinsky, R., & Kaplan, D. (2012). *One thing leads to another: Promoting industrialisation by making the most of the commodity boom in Sub-Saharan Africa*. Self-published: University of Cape Town.
- North, D.(1991). Institutions. *Journal of Economic Perspectives*, 5(1):97–112.
- Nyame, F. K. & Grant, J. A. (2014). The political economy of transitory mining in Ghana: Understanding the trajectories, triumphs, and tribulations of artisanal and small-scale operators. *The Extractive Industries and Society*, 1, 75-85.
- O’Fairchellaigh, C. (2003). Implementing agreements between indigenous peoples and resource developers in Australia and Canada. *Aboriginal Politics and Public Sector Management*, Research Paper No 13.
- Pan-Armenian Environmental Front (2014). *Armenians’ broken backbone*. Retrieved from: www.armecofront.net

- Paremuzyan, L. (2012). *Teghout mine security beat up local villagers: Residents block road in protest*. Retrieved from: <http://hetq.am/eng/news/13158/teghout-mine-security-beat-up-local-villagers-resident-block-road-in-protest.html>
- Park, B. I., Chidlow, A., & Choi, J. (2014). Corporate social responsibility: Stakeholders' effect on MNEs' activities. *International Business Review*, 23, 966-980
- PensionDanmark (2013). *EKF and PensionDenmark secure financing of large orders for FLSmidth*. Retrieved from: <https://www.pension.dk/en/english/About-PensionDenmark/News/PD-news/EKF-and-PensionDenmark-secure-financing-of-large-orders-for-FLSmidth/>
- Perri (2005). What's in a frame? Social organization, risk perception and the sociology of knowledge. *Journal of Risk Research*, 8(2), 91–118.
- Petrosyan, V., Orlova, A., Dunlap, C. E., Babayan, E., Farfel, M., & von Braun, M. (2004). Lead in residential soil and dust in a mining and smelting district in northern Armenia: A pilot study. *Environmental Research*, 94(3), 297–308.
- Power, M. (2004). The risk of everything. *Journal of Risk Finance*, 5(3), 58–65.
- Power, M. (2007). *Organised uncertainty: Designing a world of risk management*. Oxford: Oxford University Press.
- Prno, J., & Slocombe, D. C. (2014). A systems-based conceptual framework for assessing the determinants of a social license to operate in the mining industry. *Environmental Management*, 53, 672–689.
- Selmier, W. T., Newenham-Kahindi, A., & Hoon Ch, C. (2015). Understanding the world of relationships: Language as an essential tool to manage CSR in communities of place. *Journal of International Business Studies*, 46, 153-179.
- Simon, J. D. (1984). A theoretical perspective on political risk. *Journal of International Business Studies*, 15(3), 123–143.
- Stoffle, R., & Minnis, J. (2008). Resilience at risk: Epistemological and social construction barriers to risk communication. *Journal of Risk Research*, 11(1–2), 55–68.
- Tatoglu, E., Bayraktar, E., Sahadev, S., Demirbag, M., & Glaister, K. W. (2013). Determinants of voluntary environmental management practices by MNE subsidiaries. *Journal of World Business*, 49(4), 536-548.
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd edition). London: Sage.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2), 341–363.

6 Mining MNEs strengthening local institutions to legitimise business continuity: Experiences from Armenian

Jacob Taarup-Esbensen, Copenhagen Business School and Zealand Institute of Business and Technology

6.1 Abstract

This paper explores how multinational mining enterprises in Armenia manage risk from local communities by strengthening local institutions, specifically by providing services in the villages and towns for the public good where they operate. When Multinational Enterprises (MNEs) engaged in support of institutions, the local communities' dependence on the company grew stronger as they became increasingly reliant on the resource commitment. The paper argues that by solidifying their legitimacy through their support of the institutional environment, MNEs reduce the risk that communities will engage with outside and possibly powerful civil society actors that can threaten business continuity. The resource commitment thus serves a dual purpose, making communities reliant on MNEs who strengthen the local institutional environment in the absence of a fully functioning Armenian state, and acting as an effective risk mitigation tool that keeps potentially threatening NGOs and other civil society actors from partnering with local communities against the company. The paper contributes to the MNE risk management literature by highlighting the role of institutions, especially in areas where they are either absent or lack capacity to enforce their own rules. Strengthening the institutional context is hereby highlighted as a tool that MNEs can utilize in their risk management and mitigation efforts, especially in areas where a well-functioning state is absent.

Keywords: risk, mining, local communities, institutions, legitimacy, Armenia

6.2 Introduction

“In this world, a weak independent state which is rich in mines has its days numbered. Stronger states will come and lift that ‘independent’ state above the ground and sweep those mines from underneath her. Just like a mother, who lifts a child from a stool to sweep the floor and the puts the child back.” (Interview with Ecolure, 2015 citing Ler Kamser, 1926)

Institutional theory provides a conceptual framework for understanding how organisations adopt, defuse and change based on pressure from their internal and external environments (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). The international business literature suggests that MNEs demonstrate reactive behaviour to changes in their institutional environment in order to remain legitimate in the eyes of salient stakeholders (Boddeyn & Doh, 2011; DiMaggio & Powell, 1983; Ghoshal & Westney, 2004:47; Meyer, et al., 2009; Peng, et al., 2008).

Following this rationale, it is believed that institutions moderate corporate behaviour and mitigate effects that are deemed undesirable, and that corporations catering to institutional pressure are regarded as legitimate and thereby uphold their “licence to operate” (Kostova & Zaheer, 1999; Prno & Slocombe, 2014). This process is part of the *raison d’être* in societies where the institutional environment is well developed and there is a high degree of transparency in the relationship between society and business (Campbell, 2007; De Geer et al., 2009), but in developing or emerging markets, where the institutional pressure can be arbitrary or lacking and where informal institutions have a significant local impact, there can be differences in the degree to which organisations adapt to these pressures (Khanna & Palepu, 2010, p. 84; Williamson, 2000). This can be seen in cases where there is a poorly functioning judiciary system and arbitrary enforcement of rules, or government agencies promoting certain norms which contradict or are incompatible with international standards (Hoskisson, et al., 2000; Khanna & Palepu, 2000). While some organisations would look at this type of business environment as a blessing, it does present real challenges for multinational enterprises (MNEs) that span multiple locations with varying levels of institutional efficiency, and therefore pressure to conform (Burki, 2012; Kostova & Zaheer, 1999; Orr & Scott, 2008). There are multiple examples of mining MNEs that have been able to take advantage of weaknesses in institutional environments around the world and where the country where they operate has witnessed significant negative impacts (Kolstad & Wiig, 2013; Morris et al., 2012). However, despite the

potential for opportunistic behaviour, a weak institutional context presents an unstructured business environment, increased uncertainty about the “rules of the game” and a potential increase in transaction costs (Ghoshal & Bartlett, 1988; Kostova & Roth, 2002; Peng, 2003). There have been examples where MNEs behaved poorly and violated not only national but also international norms for good management because the institutional environment made this kind of behaviour possible (Kirsch, 2014). However, little is known about MNEs that actively support institutional development in their local environment and how these activities affect risk exposure.

Using fieldwork and interview data collected from MNEs in the mining sector and the institutional context of Armenia, this study seeks to understand how this form of resource commitment influences risk mitigation by answering the research question, how do mining MNEs in Armenia reduce community risk by investing in the institutional context? Answering this question contributes to our knowledge of the link between management practices as concrete investments in the institutional context and MNE risk exposure from local communities. The paper is structured as follows. First a literature review is presented which links institutional and MNE community risk management when operating in weak institutional environments. Based on the review, a preliminary model is constructed that describes the relationship between the MNE as an investor in the local institutional environment and the community, and discusses how the MNE can gain legitimacy and thereby reduce community risk. Second, there is a description of the methodology used to collect and structure the empirical evidence from fieldwork and interviews. Third, an analysis of the collected empirical evidence of the MNEs operating in Armenia is conducted using the model. Finally, a conclusion is drawn, answering the research question and presenting a revised model based on the findings.

6.3 Theory: Dealing with the institutional environment

The following section outlines the literature on risks from local communities when MNEs operate in weak institutional environments. Institutions were described by Richard W. Scott (1995) as cognitive, normative and regulatory structures that provide stability and significance to social behaviour and can be categorized as either formal or informal (North, 1990). Formal institutions refer to written laws, policies, rules and regulations governing socio-economic and political aspects of a society, whereas informal institutions refer to the social norms shared by the members of a society that serve as constraints or standards, violations of which entail social rather than legal penalties (North, 1991; Williamson, 2000). Organisations adopt the norms and

rules of their environment in order to be seen as legitimate and thereby become a reflection of social practice (Meyer & Rowan, 1977:343; Vergne, 2011). They seek to adapt to their institutional environment because they gain legitimacy, and this makes it easier for them to engage with their salient stakeholders. In advanced economies, the relationship between business and society reflects these legitimacy demands to a high degree; however, in an emerging or developing market, these institutions can be weak, informal or, as described in some parts of the literature, like voids (Burki, 2012; Khanna & Palepu, 1997; Kostova & Zaheer, 1999; Puffer et al., 2016). These business environments are considered more difficult to do business in, as they are less transparent and institutional pressure can be either missing or arbitrary in its enforcement.

For MNEs that span multiple institutional environments, the need to adapt to sometimes contradictory legitimacy demands creates significant governance and managerial uncertainties that need to be overcome (Kostova & Zaheer, 1999). Thus, there is a need for research into how MNEs can act socially responsibly, not only in their home country but also across multiple host countries (Campbell, et al., 2012; Ionnou & Serfeim, 2012). In order to be regarded as legitimate by a wider stakeholder constituency it needs to institutionalise its governance in such a way that it can be regarded as legitimate across locations regardless of the local institutions in place (Campbell, 2007).

This convergence or isomorphic pull on the MNE towards a given strategic practice takes three different forms (DiMaggio & Powell, 1983). There can be coercive but often arbitrary pressure to make changes in behaviour that will in some way affect the transaction-specific investments that the MNE is engaged in—for example, through adaptation to local legislation, which might not conform to international norms, when pursuing a subsidiary-focused strategy, or by “overbidding” local laws through the implementation of higher corporate standards than required. A mimetic isomorphism is witnessed when an MNE imitates the behaviour of other organisations based on an evaluation of how successful they are in certain activities, or makes use of certain technologies that are believed to provide a competitive advantage. In a weak institutional environment, however, such mimicking behaviour often presents the organisation with ethical and moral dilemmas when confronted with, for example, unethical conduct or non-transparent practices. Normative pressure prevails when the MNE seeks to be regarded as legitimate and pursues strategies where the practices of the company are in line with the expectations of its stakeholders. It can stem from strong supplier relationships that favour

particular systematic approaches where governance systems make sense for the sake of efficiency or there is a lack of alternative technologies, making one approach dominant.

Operating in multiple institutional environments presents a challenge to the strategic decision-making of MNEs, as they navigate between different locations which can differ in institutional pressure. In a strong institutional environment, there are isomorphic pulls for the MNE to behave in agreement with established norms and rules, while in the weak institutional environment, these isomorphic pulls will be less salient, encouraging companies to take advantage of the apparent opportunities that such an environment presents, but at the risk of losing legitimacy in other locations where the MNE is active.

6.4 Operating in a weak institutional environment

Emerging markets in general, and local communities especially, are very diverse and it is hard to pinpoint one set of uniform institutional shortcomings (Meyer et al., 2009; Rottig, 2016). In this context are Institutional voids understood as non-market institutions that raise transaction costs for MNCs to potentially excessive levels (Khanna & Palepu, 1997). And that there are social settings that are not institutionalised, either because they do not have a recognisable form as with informal institutions or that formal institutions lack enforcement. In order for a company to operate efficiently it needs to adapt its strategies to the institutional context—a country's product, capital and labour markets as well as its regulatory system—all of which, in an emerging market context, are considered weak (Khanna & Palepu, 2010). In practice, this means that when products or information are to be produced and moved around from one place to another, there can be poor or absent infrastructure to support such an enterprise. Or if companies need to hire employees, they encounter difficulties because of inadequate access to skilled employees. And finally, the regulatory system can lack adequate enforcement and be structured around social or religious norms rather than formal judicial arbitration mechanisms. There hence are three characteristics of a weak institutional environment that the MNE can be called upon to address.

First, there are issues related to the movement of the products from or within the emerging market (Khanna & Palepu, 1997; 2006). Here infrastructure, such as access to good roads, a constant supply of electricity and gas, or even telephone coverage plays a crucial role. For the MNE it often turns out to be hard to penetrate markets when such specialized infrastructures, distribution channels, or delivery systems are missing or inadequately maintained. A lack of (or poorly maintained) infrastructure can have a direct effect on the ability of the MNE to operate in

a given context and so creates a need for additional investments which are not directly related to the business, thereby increasing transaction costs (Meyer, 2001). Here the institutional weakness is linked to the inability of the institutions to accommodate what are perceived to be basic societal needs, in this case infrastructure.

Second, access to qualified labour is another issue that MNEs need to address in a weak institutional environment. The education system—and therefore prospective graduates that the MNE is seeking to employ—might not be of the academic standard needed to produce the necessary quality. While there might formally exist a physical school system, on multiple levels, the weakness comes from the lack of ability of these institutions to produce graduates of a sufficient quality that meet labour market demands. In some contexts, the local government will demand that MNEs take on local employees to build labour capacity, but if the quality of labour is not of the required standard, it could mean increased costs that must be tolerated by the company as employees need to receive extra training.

Third, companies can be required to address local social and religious norms, as they can be part of the formal or informal judicial system in the emerging market. Social or religious beliefs can be deeply ingrained in any given country context, such as in the form of religious or social artefacts that the MNE needs to be aware of and which might not be obvious given the entry mode (Williamson, 2000). These institutions can be both formal, such as official arbitration mechanisms in the community, and informal, such as norms on how to behave in certain religious or social settings that might be opaque to the outsider. Corrupt practices can be witnessed, for example, in gift giving traditions when conducting business transactions, which has left room for corruption and favouritism (Aliyev, 2014).

While weak institutional environments have a significant effect on emerging markets, they also impact the relationship between MNEs and local communities where trust in central government institutions can be arbitrary and reliance on corporate investment for basic services greater. The importance of the MNE is hereby not only limited to the direct economic and social impacts that come from its business activities but can also include its effect on a wider institutional environment.

6.5 Community risk

The term “risk” has many connotations in the literature, and there is no universally adopted definition of how the concept should be understood (Lupton, 1999). In an institutional and international business context, risk refers to how an MNE reacts and subsequently takes

decisions in an uncertain business environment, as well as the lack of certainty of the outcomes that these decisions will create (Figueira-de-Lemos, et al., 2011; Hagigi & Sivakumar, 2009; Kostova & Zaheer, 1999). This paper adopts the term as a reference to the unpredictability of outcome variables and the uncertainty connected with managerial decision-making that could affect such outcomes (Miller, 1992). Community risk is conceptualised as the relative chance that an MNE's activities prompt local communities to regard it as illegitimate and instigate a response from the community that jeopardises continued operations. Communities are here understood as local communities that are geographically situated in proximity to the MNE and thus directly impacted by the changes that arise as a result of its operations. Risk management practice in this setting is the ability to effectively apply the MNE's resources in a way that ensures that it is regarded as legitimate by the members of the local community, in this way reducing community risk.

Based on the literature, a model is presented that illustrates the relationship between local communities and MNEs from a community risk management perspective. Figure 8 illustrates how MNEs can apply resources to the institutional environment of the local community in the form of investments in infrastructure, education or cultural/social activities, thereby reducing community risk by being regarded as legitimate.

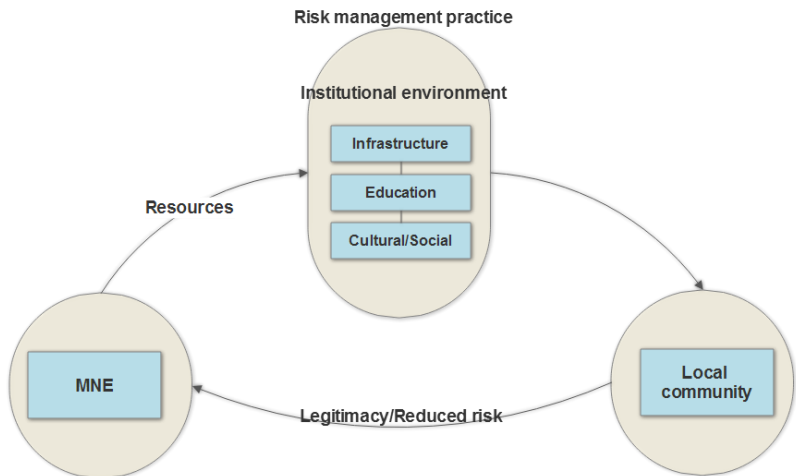


Figure 8. MNE reducing risk by investing in local community institutions

6.6 Method and analytical framework

The research was conducted as a multiple case study (Yin, 2003) and was based on an abductive approach where an initial theoretical model was constructed (Figure 8) and subsequently tested using qualitative methods and finally updated (Figure 10). Empirical data included interviews, observations and desk research that enabled the investigation of all nine MNEs currently active in the Armenian mining sector (see Table 11 for an overview of companies and operations). This approach provided a unique and in-depth insight into the industry, as well as how these companies operate and the strategies they employ to cope with a weak institutional environment. The study includes both large operations, such as the two biggest copper and molybdenum production sites in the country, and sites focusing on small scale gold production. A couple of companies are still in the early stages of exploration and are therefore not producing ore, and a number have been in production since before the fall of the Soviet Union in 1991. The sample is, therefore, representative of the MNEs in Armenia and can be used to generalise about how different strategies apply to the institutional environment compared to variables such as the age of operation, the type and stage of exploitation, and the use of Corporate Social Responsibility (CSR) or stakeholder management systems (Campbell,

2007). Data were collected from the annual statements and stakeholder and governance reporting from each mining MNE.

A thematic coding scheme (Flick, 2009) was applied, focusing on reports where the MNE engaged in some form of public good facility development activity, either in the shape of education (kindergartens, schools, etc.), infrastructure (roads, gasification, etc.) or culture (culture houses, church renovation, etc.). A further category was labelled “other” to capture any data which were not included in the three primary categories but which could be related to the MNE’s effort to influence its institutional environment (see Table 12 for an overview of findings). The statements were subsequently cross-referenced with empirical evidence from on-site field observation, as well as interviews with local community members in villages close to the MNE mining sites. This approach enabled validation of the existence and efficiency of institutions that were supported by the mining MNEs, as well as an investigation into the mechanisms that made these institutions legitimate from a local community perspective. The evidence was also compared with testimonials from non-governmental organisations (NGOs), the heads and mayors of the local communities, and articles from local newspapers that described the MNE-community relationship.

6.7 Analysis: The institutional environment and the Armenian mining sector

There have been some efforts from the Armenian government to strengthen the institutional environment and some improvements have been made; however, there continue to be areas that are lacking. Institutions related to infrastructure and culture in Armenia lack funding or are reliant on foreign direct investment (FDI), as described above, to maintain some of its basic functions. The lack of maintenance of these institutions is a key concern, especially when it comes to rural areas and activities not connected to the main traffic lines in the country, especially the north-south road between Georgia and Iran (North-South Road, 2017). Here the country has turned to the large diaspora living in France, Russia and especially the United States of America and to the companies that engage in FDI for support and not least financing. Another institution that has sought external funding has been the public educational sector that is notoriously underfunded and where quality in general is thought to be lacking. While private universities have taken over some of the educational market, they are regarded as too expensive and as not fulfilling their promise of international quality education, and have been seen to close down when they start to lose money, with grave consequences for students especially (Arka, 2013). The lack of quality public education has meant that some of the universities engage in

partnerships with private companies and organisations. For example, has Cronimet and Dundee Precious Metals supported local schools with teaching equipment (Table 12).

Mining operations in Armenia date back thousands of years and have only increased as world demand for copper, iron, silver and gold has seen new heights (Investment guide, 2013). During the Soviet period, mining production was expanded vigorously in an effort to recover the union's weak economy after World War Two. Copper and molybdenum in particular were extracted and later refined at the Alaverdi plant in the northern part of the country, creating a hub for the copper industry throughout the Caucasus and southern part of Russia. At one point, the plant refined around 50,000 tons per day, processing all the copper from Armenia, supplemented by imports from other mines in the Soviet Union (Bond & Levine, 1997). The processing plant in Alaverdi and the mine in Kajaran dominated how the Armenian mining industry developed and the government decisions to evolve the economy beyond export of copper ore. Near the end of the Soviet period (1989), the Alaverdi plant had to be closed down due to serious environmental concerns over the levels of air pollution. The post-Soviet period burdened the country with a high level of foreign debt, attempts to attract foreign direct investments through privatization and a liberal trade regime. As a result, among other activities within the industry, the Alaverdi plant had been reopened despite its continued struggle with health and environmental issues (Paremuzyan, 2015). Since then the importance of mineral products to the country's economic development has become even more apparent as new mines have opened and exports risen. In a press release on the economic growth of Armenian mining the World Bank stated that "The mining sector in Armenia could contribute to sustainable development. For this, the sector needs to be advanced in an environmentally and socially responsible manner and the benefits have to be equitably shared" (Interview with World Bank, 2016). In an effort to get the most out of its minerals and attract foreign direct investments, the government of Armenia has ratified legislation with the aim of regulating mining activities and their environmental, social and economic impact on the country as well as of attracting foreign direct investments (Mining Code, 2011). The business environment for mining companies entering the country has significantly improved since the legislation was implemented. Economic liberalisation, improvements to legislation and a focus from the Armenian government on developing the mining industry has meant that the country has gone from a total export income from industrial mineral of 24.6% in 1996 to 44.5% in 2012 and 47.3% in 2014 (ICMM, 2016). And the country has seen the entry of several new mining MNEs both engaged in greenfield as well as investing in older brownfield mining projects, for example, Lydian

International (greenfield) and Cronimet (brownfield). The mining industry has become the largest contributor to the Armenian economy, but it has not managed to develop significantly more refined metal ore production beyond the plant in Alaverdi. In 2013, the mining industry some 670 operating mines and it is estimated that there are an additional 115 metal deposits which could be worth exploring in the future, indicating that the full potential for the Armenian extractives industry is far from fulfilled (Investment guide, 2013).

There are currently 75 companies within the Armenian mining sector, dominated by domestic companies with small operations whose primary focus is on supplying the local market with materials for the construction market (Armstat Industry, 2014). In addition, there is a small (but growing) group of mining MNEs consisting of nine companies (as of 2016, two Canadian, one Russian, one British, one American, one Irish/British, one German, one Cypriot and one Chinese; see Figure 9) which are all involved in metal mining, including gold, copper-molybdenum, silver and iron. All are, or aspire to be, primarily exporters of either ore or, for some, refined copper, through the plant in Alaverdi. Due to the size of their operations, these companies are seen as possible major contributors to the Armenian economy and to the aspirations of the Armenian government to create a sustainable economy based on extractives.



Figure 9 Mining MNEs in Armenia

As stated above, the Armenian government, in cooperation with the World Bank, updated its mining legislation in 2012 to generate increased revenues from mining activities and to reduce the environmental impact of the industry and damage to the rich cultural heritage of the country. The Mining Code aims to improve governance structures and engender

transparency in the sector in general (Mining Code, 2011). Although there are disagreements between government, industry, research institutes and the different NGO groups about the quality of the legislation, the code has meant that the country has seen an increase in its tax revenues from the sector (Hergnyan, 2015; World Bank, 2014). The effect of the change has also resulted in a slowdown of migration from towns and villages close to mining sites. As stated by Vallex, “Community members are coming back instead of leaving because they or their relatives can find employment at the company” (Interview with Vallex, 2015). However, the biggest change to the industry has been that it previously regarded royalties as being a top line charge, whereas now it is a charge on turnover and profits before interest costs. In theory, this would make it more profitable for the country and harder for companies to avoid paying taxes. While the Armenian tax on mining remains relatively small compared to international standards, the hope is that the change will boost tax revenue by between 0.4% and 0.6% of GDP (World Bank, 2012). Due to fluctuations in commodity prices and a general downturn in the economy, however, the effect remains to be seen.

The environmental governance section of the mining code requires companies to systematically document their impact. They are thus required to have efficient systems for mitigation when it comes to their effect on the local environment, at the start-up, when the mine is in operation and when decommissioning the mine. The aim of the environmental management plan (EMP) is to reduce the environmental impact caused by mining by preventing irrevocable impacts, putting in place measures to reduce environmental damage generally, and putting in place reliable means of monitoring their implementation (Mining Code, 2011:3). Part of an EMP also includes contributions to an environmental restoration fund which supports the reclaiming of land when mining has ceased, and is financed by the mining companies themselves but managed by the government, which also has oversight of the restoration process. Mining companies are also charged with protecting cultural heritage sites and documenting their efforts, and restoring any sites which might be affected by mining activities. The final objective of the code is to improve the governance structure connecting companies, government and civil society actors (communities of interest), with the aim of creating more transparency; however, the implementation and management of this have been widely disputed by civil society and in the media.

Increased self-reporting has brought with it substantial interest from media and other groups who previously had very limited access to company records. The effect of increased media exposure is particularly clear for MNEs that are engaged in larger operations and have a

greater environmental and social impact, more than for individual local domestic firms that in general operate on a smaller scale. The reports typically follow internationally recognised guidelines such as the International Standards Organisation (ISO) for environmental reporting or the IFC standard for social responsibility, but not necessarily explicitly (ISO, 2012; IFC, 2012). One of the consequences of this increased transparency has been that mining MNEs are being held accountable for their reporting and are subsequently being tested on their own claims by NGOs, the media and other civil society groups interested in the impact of mining operations (Aghalaryan & Baghdasaryan, 2014). NGO groups have, for instance, brought companies and government agencies before the courts, claiming that they did not follow Armenian law and failed to accurately report their social and environmental impact. As stated by one of the environmental NGOs, “We have gone to the courts to get the government to do inspections but they do not do it, starting from 2012 [Referring to the Vallex project in Teghut]. We ask, knocking on the door, but they will not do it. Because the system itself is not valid. The companies can only do something negative because the system is not working” (Interview with Teghut, 2015). There has not yet been any court decision against mining companies based on information put forward in an EMP. However, there continues to be some confusion regarding the nature of the relationship between mining companies and NGOs: “It is a big risk. It is a characteristic of the NGO here is that they do not understand their own role. If you are an NGO you need a Code of Conduct. It is the worst I have seen in the world. They base their arguments on non-scientific facts” (Interview with Vallex, 2015). As a consequence, individuals and NGOs have increasingly lost interest in pursuing companies through the Armenian judiciary system. There is a general lack of trust in the legal system in Armenia, a tendency that has been declining in the last five years, which could also be a contributing factor to this loss of confidence (CRRC, 2016). In 2008, 35% of young people between the ages of 18 and 35 said that they trusted or fully trusted the legal system, but in 2013 this number had gone down to just 19%. Among the population aged 56 years or above, trust had declined from 27% to 11%. The lack of confidence makes Armenians the least trusting in their legal governance system of the three southern Caucasus countries (CRRC, 2016). During the period of this study, there were two major demonstrations, suggesting that trust in government institutions is lacking.

In rural Armenia, public institutional structures such as efficient local political participation, healthcare, access to education or basic infrastructure do not exist, are worn down or are very rudimentary (IFC, 2012; IMF, 2015). There are many reasons why the country is unable to support effective local institutional structures in the countryside, including the

dismantling of the Soviet Union, which removed or degraded a lot of these basic services; the relatively short history of democratic practices; a turbulent start for the nation, with a war with Azerbaijan; issues of corruption on all levels; and economic uncertainty (De Waal, 2003, 2010). While there have been some efforts to strengthen the institutional environment, there are still significant challenges, especially in the rural parts of the country where investments are rare and informal practice is the rule when upholding primary institutional functions.

The mining Multinationals

There are currently nine mining MNEs which include all the foreign companies that are engaging in activities in the country, ranging from small exploratory operations in the early stages of development, to large scale production facilities that have evolved over several decades. Table 11 provides an overview of the MNEs.

Table 11. Mining MNEs in Armenia

MNE	Home country	Subsidiary operations location	Type of exploration/ Production	Stage of mining operation	Years of production	CSR standard used
Vallex Group	Cyprus	Teghut, Shnogh	Copper/ molybdenum	Production	1+ year	IFC
Lydian International	Canada	Vayots Dzor, Seravan and Gndevaz	Gold	Exploration	0 years	IFC
Cronimet	Germany	Kajaran	Copper/ molybdenum	Production	25+ years	None
Dundee Precious Metals	Canada	Kapan	Gold/Silver/ Copper/ Zinc	Production	25+ years	GRI
Global Gold	United States	Marjan, Toukhman and Getik	Gold	Exploration	10+ years	None
Fortune Oil	China	Hrazdan	Iron	Exploration	0 years	None

GeoPro Mining	Russia	Ararat, Agarak and Zod	Copper/ Molybdenum /Gold	Production	25+ years	Resources for good
Orogen Gold	United Kingdom	Mutsk	Gold	Exploration	0 years	None
Centera Gold	Canada	Atevan and Homik	Gold/Silver/ Copper/Zinc/ Bismuth/ Selenium/ Tellurium	Exploration	0 years	EITI prepared

In January 2012, the government of Armenia, in cooperation with the World Bank, implemented new mining legislation, the Mining Code (2011), in order to generate increased rents from mining activities and reduce the cost related to the impact of the industry on the environment and on the country’s rich cultural heritage. The Mining Code aimed to improve the governance structure, engender transparency in the sector in general, and to strengthen the institutional infrastructure around the industry. While there are disagreements between government, industry, research institutes and different NGO groups about the quality of the legislation, the country has witnessed an increase in its tax revenues from the sector (World Bank, 2014). Under the Mining Code, companies are obliged to adhere to a set of environmental governance rules, compelling them to document their social and environmental impact. As stated by Vardan Vardanyan, a government official overseeing the implementation of the code, “the law on community contributions had recently been amended in relation to new companies.” They are also required to implement effective systems for managing their social and environmental impact on local communities, both in the exploration phase and after the mine is in production. As stated by Mr. Vardanyan “currently mining companies supported communities to renovate the roads, schools and kindergartens and to purchase computers; in addition, they supported communities to solve many other issues, as part of company’s corporate social responsibility” (Interview with Vardanyan, 2015). Part of the Mining Code includes a contribution to the environmental restoration fund, which is to be used for reclaiming land when mining has ceased, including mitigating the effects of tailings. The fund is financed by the companies themselves and is managed by the government, which also has oversight of the

restoration process. The same is true for cultural heritage sites, which companies are also charged with protecting, documenting their activities and restoring any sites that might be affected by production. The final objective of the code is to improve the governance structure connecting companies, government and civil society, with the aim of facilitating increased transparency. As the World Bank consulted the Armenian government when drafting the legislation, there is a strong correlation between the code and the World Bank approach to CSR and the International Financial Corporation (IFC) standard (IFC, 2012).

The increase in self-reporting has brought substantial interest from the media and other groups that previously had very limited access to company records. This is also true for MNEs that are engaged in larger operations, both financially and physically, and thus have a greater impact on society as a whole than local domestic mining firms. The reports typically follow internationally recognised guidelines such as the World Bank (IFC) standard for social responsibility, the Global Reporting Initiative (GRI), the Global Compact issued by the United Nations, and the newly formed EITI standard for transparency in extractive industry, which Armenia is applying for membership of (EITI, 2015; GRI, 2013; IFC, 2012; UN Global Compact, 2014). One of the consequences of this increased transparency is that companies are being held accountable for their own reporting and the subsequent tests of their claims by NGOs, university researchers, the media or other civil society groups interested in the impact of mining operations. To date, however, there has not been any court decision against a mining company that could be connected to its impact on local communities. This, along with other instances of what is regarded as corrupt behaviour, has meant that stakeholders are becoming increasingly hesitant to pursue companies through the court system, as trust in the legal system has decreased. As stated by a representative from a NGO opposing the Vallex mines in Teghut “This country is a complete dictatorship. You should know. Every single step at every level” (Interview with Save Teghut, 2015). And when talking about the special relationship between the company and the local government, they stated that “When they got the license and started grabbing the land they used different forms of power, including social power, to influence the villages. And the fact that the company is offshore is a form of corruption” (Ibid). These statements are also supported by research done by another NGO which in 2008 found that 35% of young people between the ages of 18 and 35 said that they trusted or fully trusted the legal system, a number that in 2013 had gone down to just 19% (CRRC, 2016). Among the group aged 56 years and above, the proportion decreased from 27% to 11%, showing a general lack of trust in the legal system by the general population. This makes Armenians the least trusting in

their legal governance system of the three southern Caucasus countries (CRRC, 2016). The situation is further supported by claims from Transparency International (2015) that the country ranks at the lower end (95 out of 165) of the Corruption Perception Index, together with indicators of the quality of rule of law.

While there are indications that the Armenian government is trying to strengthen the governance structures surrounding the country's dominant mining industry, there remain issues when it comes to actual enforcement. This means that MNEs operating in this institutional environment have to observe some basic legislative demands but can, to a large extent, choose the level of environmental and social impact mitigation with which they want to engage, thereby de-facto having a choice between engaging with formal or informal institutions as they see fit. This presents businesses with significant institutional uncertainty, where formal institutional structures, such as the court system, government agencies and local governance structures, can easily be identified but in fact are lacking rigid enforcement ability or general legitimacy.

6.8 MNE investments in local institutions

In this weak institutional environment, mining MNEs have increasingly been involved in the institutional context of local communities where they are active. As the model shows and based on the literature review, these efforts can fall within three main categories: education, infrastructure and culture/social institutions. A summary of the findings on MNE activities in the local communities is listed in Table 8.

6.8.1 Investing in education

Involvement in education-related investments has been a priority for a number of MNEs engaged in local community development. Out of the nine mining companies, five had made commitments either to build or to renovate educational facilities, thereby strengthening educational institutions in the area. Activities ranged from kindergartens and financial support for education to financing a library and providing scholarships for higher education abroad. For example, the Russian MNE GeoProMining committed resources to education that were described thus by the company:

GeoProMining pays special attention to educational programmes for children and teenagers. Along with the opening of the interactive classes and the scholarship programme for students in the universities of Russia and Armenia,

we support projects aimed at pre-school children. We are involved in the construction of a kindergarten in the Ararat region and support a Children's Development Centre in Agarar in its educational programmes for children from low income families living in the region of Gegharkunik. (GeoProMining, 2016)

The Canadian company Lydian International reported: "In Gndevaz, the community infrastructure spending is primarily focused on schools and kindergartens, since many require a significant amount of structural repair work." (Lydian, 2016). Smaller mining operations, or mining projects that were in the initial phases of construction, were less likely to invest, or openly report that they did, in education. One exception was Lydian International, which has invested in a library as well as a playground and kindergarten facilities, starting the exploration phases of the project before construction and production commenced.

The community response to these activities was generally positive when describing the impact of corporate commitment to strengthening educational institutions. The main focus was on how the mine would impact the community in the long term and how education would help community members find employment, especially for the younger generation. For example, in Saravan village, near the Lydian International project, "...the company agreed to transfer employees to University; the company covered the tuition fees but didn't pay for their accommodation and transportation expenses. They were studying part-time, because they continued working for the company parallel to their studies" (Interview with Saravan, 2015). Issues with migration are a major concern for most of the communities, where people migrate primarily to Russia in order to find employment. One villager from Teghut said that "the community had grown to some extent and because of the project there were vacant workplaces. Therefore, the villagers of Teghut will not leave the country to work in Russia" (Interview with Teghut, 2014). The Russian GeoProMining commitment in both Ararak and Ararat village showed that long-term commitment is important, stating that "The smartest youth of Ararat village should have been selected and sent to training and education in Russia. Finishing their education, they would become future employees of the Zod factory. This project was successfully launched during the first year, and then it stopped" (Interview with Ararat, 2015). While the commitment to educating the youth was welcome, the lack of long-term commitment was not well received, creating resentment about how committed GeoProMining was to the development of the village.

The educational institutions in rural villages and towns in Armenia have been underfunded for a number of years, which has created a situation where both access to and quality of teaching have diminished. The development has meant the institutions surrounding all levels of education have become weak, as they have become unable to sustain themselves either through taxes from the Armenian central government. Mining MNEs have invested in educational facilities and in this way supported and strengthened local educational institutions but have at the same time also taken over (at least) some of the functions of the state. While private sponsorship of state run institutions is not a problem in itself there is a possibility that the power of the state to enforce its laws will be weakened as decisions to invest (and not invest) in certain educational facilities is left to the discretion of private actors.

6.8.2 Investing in infrastructure

In most of rural Armenia, and therefore also around mining sites, infrastructure (e.g. roads, gas, electricity, telephone, etc.), like education facilities, is either absent or poorly maintained. As the government cannot provide infrastructure funding for these often very small and remote communities, the investment from MNEs is for the most part welcomed. The companies need the infrastructure because it is linked to production at the mine, and for the transportation of heavy equipment to and from the mining site. This has resulted in local communities gaining access to gas, to paved and maintained roads and to a constant supply of electricity. For example, a village head from Shnogh village stated that “Due to the joint efforts of Shnogh village municipality and Vallex Group, gas had been supplied to the village through a newly built eight-kilometre gas pipeline” (Interview with Shnogh, 2015), which connected it to two nearby villages. According to the village head in Teghut, a village within a few hundred meters of Teghut mine, “roads have been renovated, the quality of electricity and telecommunication improved, due to the financial support of the Vallex Group” (Interview with Teghut, 2014), testifying to evidence of MNE commitment to the local community.

It is difficult to differentiate between the operational requirements of an MNE and the extent to which the infrastructure commitment is the result of a deliberate attempt to do public good; however, evidence suggests that it is a combination of both, as building gas pipelines, providing electricity and paving roads in the villages in the area can be done at a significantly reduced price compared to doing the same projects independently. The engagement in infrastructure is also the most well described part of the corporate reporting, where, for example, GeoProMining (2016) notes their “involvement in the development of socioeconomic

infrastructure in the regions where the company operates,” describing the details of the commitment as “co-financing the construction of a gas pipeline in the village of Seravan in the Gegharkunik region of Armenia.” For Cronimet, the level of commitment was very much up to the local subsidiary, taking an arm’s length approach to its ore production; however, neither Cronimet nor GeoProMining had implemented any formal governance system to handle stakeholder relationships, opting for independent projects or different forms of philanthropy and sponsorship investment. This also meant that local communities were heavily reliant on their relationship with subsidiary managers and the MNE’s willingness to engage with the mayor for the village future development. Relying on the discretionary support of mining MNE managers, rather than on the municipality or central government, has left room for informal institutions to become more salient with possible emergence of kinship corrupt and opportunistic behaviour. While very few talked about the presence of corruption, and if they did called it a “minor issue” (Interview with Shnogh, 2015), reliance on the discretionary decision of the company to support infrastructure development left local politicians in a weak negotiating position.

The communities have welcomed those infrastructure projects that have made improvements to community life; however, this has also meant that community members are becoming increasingly reliant on the goodwill of the MNE rather than on services that can be provided by the state. As stated by a mining MNE manager from Lydian International (2016) “We build the gas pipeline and improved the irrigation system. Infrastructure and access wise they are better off” (Interview with Lydian, 2016). And the mayor of Kajaran city described the situation:

Previously the city was connected to Yerevan through the railway; there was also an airport and people could travel to Yerevan by plane. After the Soviet period, the only connecting routes were roads. The access to good roads, electricity or telephones changed as a result of Cronimet’s investment activities. The company is the largest mining company and in fact contributed to recognition of Kajaran city (Interview with Kajaran, 2015)

Some communities have already felt the consequences when company commitment decreases and there is less willingness to meet community expectations. For example, the mayor of a local village near a GeoProMining site said: “when villagers asked about the promised bus, the company replied that they have already renovated the ceiling of Ararat village’s

kindergarten and didn't have sufficient financial resources to purchase the bus" (Interview with Ararat, 2015). The excuse was that commodity prices were down and the company could no longer keep its commitment to the village. The reliance on the company to provide this type of public good and the discretion of mining MNE managers have created significant resentment in the communities towards the company, but also against the Armenian government, which is blamed for not providing these public goods to start with. The example illustrates the relationship of formal and informal institutions. As the Armenian government is unable to provide infrastructure, the reliance of the community on its informal relationship with mining MNE managers becomes increasingly important. Thus, the community grows increasingly dependent on the resources that the MNE is able to provide and its ability to maintain a good relationship with MNE managers.

6.8.3 Investing in culture

The country has one of the oldest histories in the world, dating back to the very beginning of civilisation, some 5000 years BC, and later to the very origins of Christianity (De Waal, 2010). This means that the country is littered with cultural heritage sites, many of which are unexcavated. The Mining Code (2011) prompts companies to engage in cultural heritage protection on the mining site and in the area affected by mining operations. All companies that are reporting on cultural heritage are engaged in preservation projects in one way or another. Most of the MNEs publicly acknowledge this responsibility. According to Dundee Precious Metals (2014): "We also engaged an independent archaeology expert to work with our Kapan employees and local archaeologists to ensure that both Armenian law and best practices are consistently being applied." A large proportion of cultural heritage sites are situated outside the mining areas and are therefore not formally part of the responsibilities of the mine, according to the mining code. However, in many instances the Armenian government has been unable to fund proper archaeological exploration, and therefore many heritage sites are left untouched or are reburied when discovered. This has left several potential discoveries undocumented and unknown to the rest of the world, creating a situation where private actors such as mining MNEs are regarded as a source of funding for preserving and, to some extent, communicating about Armenia's cultural heritage.

Armenia has a rich and old Christian history, and thousands of churches are scattered all over the country, many of which are in need of restoration. Some MNEs take on this extended

responsibility and engage in projects aimed at preserving old churches, and engaging in the construction of new churches. In Alaverdi, where Vallex Group is conducting copper smelting, a new church was anointed with the support of the company and with the participation of high-ranking officials and the clergy of the Armenian Orthodox Church. This also provided an opportunity to place the church project in a wider cultural setting, as communicated by the corporate president: “The new church became a new spiritual-cultural axis for Alaverdi: rallying round it, it became easier for people to overcome internal contradictions and separations, and united they could undertake new projects and new achievements in the fields of spiritual and material culture” (Vallex, 2014). This also suggests that the church could be seen as a way for the community and the company to come together, despite past and present differences.

Sponsoring sports facilities have been a focal point for some MNEs, which have seen the opportunity to communicate about their company in other cultural settings. The types of activity that the MNEs have engaged in have typically been related to popular sports or games, such as football or chess tournaments, or the sponsorship of smaller local events. As most villages are quite small, with no more than 350 members, there are only a few local communities that can benefit from large sports facilities. This means that the typical sports facilities project is in the form of renovation of a sports hall connected to the local school, or a one-off sporting event. Most of the MNEs do not engage directly in sponsorship, however, but rely on project funding that the local community can apply for and then decide what kinds of facility should be improved, so that in some cases these are facilities for sports.

Financially supporting sports and cultural events is, as in many other places, regarded as philanthropic activity that is expected from all companies of a certain size and does not in itself constitute an influence on the institutional environment. However, in rural Armenia there is little or no funding for these types of activities, which leaves development of these types of activities to private actors, including the Armenian diaspora or, in this case, mining MNEs who are keen to make a positive impression. The Vallex investment in a new church also provides a good example of private investors making themselves important actors in the community and preservers of a key institution, which had been neglected in Armenia throughout the Soviet period. While the building of the church supports a formal institution that is widely recognized in Armenian society as a normative institution, Vallex is at the same time strengthening its own legitimacy in the community.

6.8.4 Other types of institutional support

Some activities fall outside the three main themes that were identified, either because they lack institutional rigour in the form of a physical and tangible presence, or because they are outside typical stakeholder governance structures. Some examples of activities that have institutional impact are when MNEs like Cronimet create a charity that supports different projects for which the communities apply. As noted by the company, “the Foundation is organised as a non-profit corporation exclusively for public welfare, community involvement and charitable purposes” (Cronimet, 2016), which reemphasises the institutional commitment of the MNE to the community, along with its willingness to be involved in public goods development. Another example is when GeoProMining was the “co-sponsor of the international sports forum ‘Russia—a Land of Sports’ and the 5th Annual International Children of Asia Games in 2012” (GeoProMining, 2016), thereby creating a link between subsidiary activities and the home country. These types of large scale projects are rare, however: the general focus seems to be on a much smaller scale and is to a larger extent embedded in the community and its daily needs, as with many of the other examples described above.

6.9 MNE strategy and legitimacy

Of the nine MNEs included in the survey, four distinguished themselves by engaging with the communities that were directly affected by their activities. The Vallex Group, Lydian International, Cronimet and GeoProMining have all focused on creating a diverse set of localised solutions with three themes—education, infrastructure and culture/social. While both the Vallex Group and Lydian International used the IFC standard to govern the relationship, GeoProMining had no such standardised approach in place. All three were mining at one specific site in the country, and could thus concentrate on a limited number of local communities. The effect of this was also evident when talking to village heads and mayors. They claimed that contact with the MNE was more frequent and many of the initiatives that were implemented had originally come from the local communities themselves, such as the need for water, gasification and road maintenance (infrastructure), but also in relation to cultural church renovation and the establishment of culture houses. This local commitment also brought significant media publicity and attracted the attention of NGOs. For example, the CEO of Lydian International stated: “The NGOs here are extremely aggressive; they are more activists than anything else. The greatest example is that the day before yesterday we had a meeting organised by NGOs and one of them stood up and said that if I had known that Lydian

International was here I would not have come” (Interview with Lydian CEO, 2015). While the MNE had made significant investments in the local communities, it was difficult for them to enter into a dialogue with civil society: “They do not want to engage. They have a very primitive view that activists can stop mining, which in my view is a total dream. They do not understand that the best way to improve mining is to engage with mining companies” (Ibid). There were also evidence that meetings with communities and NGOs had a direct effect on mining projects: “As far as I know [it] is Vallex and Lydian doing some community engagement projects and meetings. And I know that Lydian changed the place of tailings because of local information. It is difficult to say what the direct impact will be of these meetings” (Interview with World Bank, 2015), indicating that there was at least some willingness to meet community demands.

When the same questions were asked of the NGOs, it was claimed that the investments and efforts are a front for “stealing” the resources of the country and that, through their investments, they seduce the local population so that they do not know what the real social and physical impact will be until they are powerless to do anything about it. An account from a village that has been affected by mining for several decades illustrates the long-term effects on the community and how companies scale down their cleaning procedures:

The emission cleaning procedure was poorly performed during recent years. During Soviet times there was high consistency and tones of bleach were used to clean and neutralize the cyanide, but currently the company is owned by foreign organization and they neglected the proper cleaning processes. The birds were sitting on polluted water and dying, most probably that was conditioned by the heavy metals, which had very negative impact on health, tumour is widely spread disease in Ararat village, it had massive character and the detected cases of 1, 5, 3, 6 years old children’s cancer weren’t coincidences (Interview with Ararat, 2015).

The NGOs had much the same perspective on the MNE, but reversed, especially in relation to the process of negotiation with the local community and the environmental impact of mining, specifically the consequences related to waste tailings dams and the possible long-term effects, such as when talking about the site where Cronimet is producing copper:

What will happen if it closes? Image if that would happen. Remember Artavik? It is the village where the tailings dam is located. They have literally have been

complaining to the Soviets since the 1970s and after that the Armenian government about the pollution, and have talked about resettlement. The village does not exist anymore now (Interview with save Teghut, 2015).

These are examples of many descriptions of the relationship between mining MNEs and NGOs. However, municipality and local government officials are becoming increasingly reliant on the MNEs to provide them with a legitimacy base, because of the investments that the company has brought to the communities. The relationship affords them a position where they negotiate on behalf of the village and thus ensure resource investments in popular or much needed institutions that improve the daily lives of community members. The pattern here was that the older the mine site, the deeper the ties between the community and the MNE, and these strong bonds between the two made it difficult for NGOs to actively engage with local communities and get them to engender significant changes. An indication that the relationship was strong was also evident, in that communities that were heavily affected by the negative consequences of mining did not want the mine to close despite evidence to support such action. As one person said, “I am sure that there is no company in the world which would be able to fully eliminate risks—for example, the car engine didn’t make any sound when only in a standing position” (Interview with Kajaran, 2015), despite having earlier stated that the town had an increased number of cases of lung disease, cancer and children born with mental and physical handicaps.

GeoProMining experienced a loss of legitimacy, mainly due to its failure to live up to the expectations of the community—for example, when the company was accused of failing to continue its scholarship programme for promising young engineers and not providing a promised bus service—creating room for village leaders, NGOs and newspapers to criticise the company, which has further increased the loss of legitimacy. Another example is when roads were blocked after it was rumoured that Georgian drivers would take over the transport of ore from the mine to the processing plant: “the country authorities speak about their intention to increase the number of working places to prevent migration, but when we apply to them with a protest against the enterprise administration, we hear in reply, if you don’t work, we will hire Georgians” (Interview in Ararat, 2015). Sevan has raised concerns about future access to fresh water around the only major lake in Armenia, asking the Armenian government to intervene in the Lydian International gold mine project. The CEO of Lydian International described the confrontation with the local community in Gndevaz: “They came with buses to the project but

that is the only case. There was one demonstration in front of the town hall. There are not many demonstrations but there is opposition. This is the NGO; they are fighting anything new” (Interview with Lydian, 2015). Other companies also experienced a loss of legitimacy as rumours spread among community members about decisions made by the mining companies.

The remaining MNEs did not engage in any known type of public good activity and primarily communicated with potential investors through their web sites on geological data on ore yield. Most of the companies had not made any direct investment in local communities and had primarily engaged in different forms of sponsorship, waiting for the community to engage. All these MNEs experienced a legitimacy loss with the local community, such as when the Global Gold operation was accused by an environmental NGO of ignoring grievances in Marjan/Meliq: “For years they have given us promises, but to no avail. On behalf of our community, I’m posing demands with regard to the implementation of social programmes” (Interview with Ecolure, 2015); and “It has already been mentioned that the company has created an atmosphere of fear and threatens not to pay the miserable overdue salary to complaining villagers.” The issues escalated as Cofls, in this case the two NGOs Ecolur and the Union of Greens, got involved:

The village is dirt poor. So far the company hasn’t implemented any social programme in the village, while the villagers make income not from the mine, but from high mountain meadows, black earth soil which gives magnificent opportunities for the development of agriculture. All this is under the hazard of complete destruction, which will turn into a huge loss for Armenia, and a direct way to migration for the villagers (Interview with Krikorian, 2013).

This example highlights that having no engagement with local communities left room for environmental and social NGOs to get involved and apply pressure to the mining MNE.

Committing the mining MNEs’ resources to strengthening the institutional context will build legitimacy with local communities. Through the experiences of others and how the company has handled similar situations in the past, the company is able to create a structure for how to efficiently commit its resources, in this case towards infrastructure, educational or cultural/social types of activities. However, when it comes to actual implementation, the mining MNE is reliant on the experiences of local managers and experts who have tacit knowledge and understand local informal institutional pressures, as well as what kind of resource commitment

would actually help build this legitimacy. While explicit knowledge creates structure, and makes the process of community engagement more efficient, at the same time tacit knowledge helps the company to know what type of infrastructure, educational or cultural/social institutions the firm can support in order to attain legitimacy. A summary of the investments that the individual mining MNEs have invested in can be found in Table 12. The differences in investments and in what type of activity that the mining MNE has engaged in is a mirror of the institutional pressure and the extent the this has legitimised the company.

Table 12. Mining MNE community engagement efforts

Multinational Enterprise (MNE)	Local context supported or developed			Other activities
	Educational facilities	Infrastructure	Cultural facilities	
Vallex Group	- Kindergarten - Scholarship	- Roads - Gasification - Repair of houses	- Culture house - Church	- Formal local grievance system
Lydian International	- Playground - Community library	- Water distribution pipeline - Garbage collection - Roads - Irrigation system - Gasification	- Administration building - Culture house - Sports facilities/competition	- Local hospital equipment upgrade - Local TV channels - Donations and scholarships - Tree nursery project - Ambulance service - Local grievance system
Cronimet	- Support of existing educational facilities, local and regionally	- Subsidising local municipality healthcare facilities	- Sport facilities	- Charity established
Dundee Precious Metals	- School - Kindergarten	None	- Church renovation - Sports events	- Scholarships - SME funding

Global Gold	None	None	None	
Fortune Oil	None	None	None	
GeoProMining	- Scholarship (education in Russia) - Kindergarten	- Water - Gasification - Fire safety	- Sponsorships (focus on events, education and sports)	
Orogen	None	None	None	
Centera Gold	None	None	None	

6.10 Findings

It was found that MNEs were engaged in development of local institutional context and supported infrastructure, education and cultural facilities. First, MNEs engaged in such activities in order to remedy the lack of infrastructure that was needed to conduct mining operations, such as access to adequate roads, electricity and gas. The typical MNE extended the infrastructure development to include nearby villages, as the costs associated with doing this were minimal compared with having to do the same activity at a later stage when labour and machinery might be unavailable. The support of educational institutions served much the same purpose, but could be considered a two-track strategy. One MNE focused on competence building that would serve as a future recruitment base for the MNE, such as investing in university scholarships. The second type of investment was focused on pre-school or primary school institutions, which could not be directly translated into competency building, at least not in the foreseeable future. Thirdly—and the type of activity most distant from the business of mining—was involvement with cultural institutions. Such activities were more philanthropic in nature and involved traditional sponsorship of sports or other forms of cultural activity, but also larger projects like conservation or even the construction of churches and culture houses. This type of activity was more distant from the original purpose of the MNE and did not serve any direct purpose in terms of business continuity.

Resource commitment in the institutional context was not only a direct operational requirement, as in the case of infrastructure and education, but also served a purpose as part of a risk mitigation strategy towards NGOs and the media. By becoming legitimate, and as the dependence of local communities grows stronger on resource commitments, an MNE can reduce the risk that the community will engage with these outside, and possibly powerful, civil society

actors. Support of the institutional context thus serves a dual purpose, making communities reliant on the MNE by providing public goods that strengthen the local institutional environment in the absence of a fully functioning Armenian state, and as an effective risk mitigation tool that keeps potentially threatening NGOs and other civil society actors from partnering with local communities against the company by depriving them of a legitimate platform from which to speak.

6.11 Updated model

The findings illustrate the need for a revision of the initial model that was constructed on the basis of the MNE literature. In the initial model, it was argued that there would be a connection between the resource commitment of the MNE and how the local community perceived it as legitimate, thereby reduced community risk exposure. The findings show that committing resources to the local community not only serves the purpose of building legitimacy, but also deprives civil society actors of key parts of the argument for opposing mining projects, namely support from the local community. The updated model (Figure 10) illustrates how civil society actors are reliant on being regarded as legitimate representatives of local community interests in order to make legitimacy claims against the mining MNE and hence pose an increased risk.

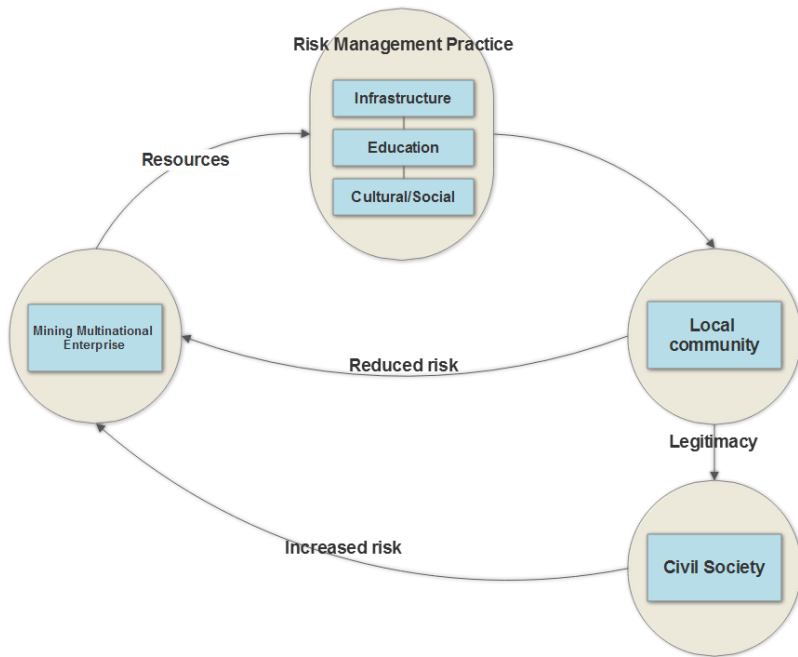


Figure 10. Revised model of MNE community risk management

6.12 Conclusion and contribution

This paper has investigated how weak institutional pressure affects corporate decisions to invest in infrastructure, education and cultural activities, and the extent to which these have affected the legitimacy of organisation and thereby community risk. By asking the question of how mining MNEs in Armenia reduce community risk by investing in institutional context, it was found that these investments served two purposes when it came to reducing community risk. First, a significant proportion of the resource investments could be traced back to the operational requirements of the mining MNE, especially when it comes to strengthening the local infrastructure. The community benefited from the necessary construction expenses that the company would have to endure regardless as part of the construction or maintenance of the mine. By making these investments, the MNE gained legitimacy as local institutions were

supported or maintained by the company which the community could not support by themselves. Second, by becoming legitimate, and as dependence on the resource commitments of the MNE grew stronger, it reduced the risk that the community would engage with outside actors and possibly powerful civil society actors. Therefore, the resource investments of the mining MNE in supporting local institutions could be directly linked to community risk mitigation.

This paper contributes to the MNE risk management literature by highlighting the importance of local communities as a source of legitimacy, not only directed at the MNE but as an important part of risk management mitigation. Civil society actors pose a bigger threat to the MNE than the local community because of the organisational and financial resources that NGOs have available to them; however, in order to utilise these resources, they need the legitimacy that comes from the local communities' endorsement. By utilising their tacit knowledge about local conditions, MNE's can deprive civil society actors of legitimacy from the local community and it becomes difficult for these actors to pose a real risk to business continuity because of the lack of local backing. Hence the construction of institutions is a risk management practice that MNEs can utilise in regions where the institutional environment is weak and therefore presents the company with opacity when it comes to the rules of the game. By focusing on the local community and the direct impact of the MNE, it can effectively solve some of the more complex and less transparent wider challenges that arise in this type of business environment. The importance of local communities in effective risk management practice has in this sense been neglected in the current MNE risk management literature.

6.13 References

- Aliyev, H. (2014). Civil society in the South Caucasus: Kinship networks as obstacles to civil participation. *Southeast European and Black Sea Studies*, 14(2):263–282.
- Armstat Industry. (2014). *Statistical yearbook of Armenia*. Retrieved from: <http://www.armstat.am/en/?nid=45&year=2014>
- Arka. (2013). Armenia's education ministry is to inspect private universities http://arka.am/en/news/society/armenia_s_education_ministry_is_to_inspect_private_universities/ (Accessed 17/11/2017)
- Boddeyn, J., & Doh, J. (2011). Global strategy and the collaboration of MMEs, NGOs and governments for the provisioning of collective goods in emerging markets. *Global Strategy Journal*, 1:345–361.
- Bond, A. R., & Levine, R. M. (1997). Development of the copper and molybdenum industries and the Armenian economy. *Post-Soviet Geography and Economics*, 38(2), 105–120.
- Burki, U. (2012). Institutional voids and corporate governance: A conceptual understanding. *International Journal of Business and Management*, 7(10):99–107.
- Campbell, J.L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 22(3):946–967.
- Campbell, J. T., Eden, L., & Miller, S.R. (2012). Multinationals and corporate social responsibility in host countries: Does distance matter? *Journal of International Business Studies*, 43, 84–106.
- Caucasus Research Resource Centre (CRRC). (2016). Retrieved from: <http://www.crrccenters.org/>
- De Geer, H., Borglund, T., & Frostenson, M. (2009). Reconciling CSR with the role of corporations in the welfare states: The problematic Swedish example. *Journal of Business Ethics*, 89:269–283.
- De Waal, T. (2003). *Black garden: Armenia and Azerbaijan through peace and war*. New York, NY: New York University Press.
- De Waal, T. (2010). *The Caucasus: An introduction*. New York, NY: Oxford University Press.
- DiMaggio, P.J., & Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. *American Sociological Review*, 48(2):174–160.
- Dundee Precious Metals. (2014). Sustainability report – We succeed because we care. Retrieved from www.dundeeprecious.com (Retrieved 10/05/2015)

- Extractives Industries Transparency Initiative (EITI). (2015). *EITI International Secretariat*. Issued 1 January 2015, Oslo, Norway.
- Figueira-de-Lemos, F., Johanson, J., & Vahlne, J. (2011). Risk management in the internationalization process of the firm: A note on the Uppsala model. *Journal of World Business*, 46(2):143–153.
- Flick, U. (2009). *An introduction to qualitative methods*. (4th edition). London: Sage.
- GeoProMining (GPM). (2016). Corporate website Armenia, retrieved from: <http://www.geopromining.com/en/our-business/operations/agarak/> (Accessed 01/05/2016)
- Ghoshal, S., & Bartlett, C. (1988). Creation, adaption and diffusion of innovations by subsidiaries of multinational corporations. *Journal of International Business Studies*, 19(Fall):365–388.
- Ghoshal, S., & Westney, D.E. (2004). *Organization theory and the multinational corporation*. (2nd edition). New York:Palgrave Macmillan.
- Global Reporting Initiative (GRI). (2013). Sustainability reporting guidelines. Amsterdam: Global Reporting Initiative.
- Hagigi, M., & Sivakumar, K. (2009). Managing diverse risk: An integrated framework. *Journal of International Management*, 15:286–295.
- Hoskisson, R.E., Eden, L., Lau, C.M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3):249–267.
- International Council of Mining and Metals (ICMM). (2016). International council on mining and metals, Twitter. Retrieved from: <https://twitter.com/search?q=ICMM&src=typd> (Retrieved 05/10/2016)
- International Finance Corporation (IFC). (2012). IFC performance standard and environmental and social sustainability. Washington DC: World Bank Group.
- International Monetary Fund (IMF). (2015). *Republic of Armenia*. Washington DC: IMF Country Report No 15/65.
- Investment Guide. (2013). *Investment guide: Armenia 2013*. Armenia: The Ministry of Economy of the Republic of Armenia.
- Ionnou, I., & Serfeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43:834–864.
- Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, July–August:41–51.
- Khanna, T., & Palepu, K. (2000). The future of business groups in emerging markets: Long run

- evidence from Chile. *Academy of Management Journal*, 43(3):268–285.
- Khanna, T., & Palepu, K. (2006). Emerging Giants – Building world-class companies in developing countries, *Harvard Business Review*, October:60-69
- Khanna, T., & Palepu, K. (2010). *Winning in emerging markets: A road map for strategy and execution*. Boston, MA: Harvard Business Press.
- Kirsch, S. (2014). *Mining capitalism: The relationship between corporations and their critics*. Berkley, LA: University of California Press.
- Kolstad, I. & Wiig, A. (2013). Digging in the dirt? Extractive industry FDI and corruption. *Econ Gov*, 14:369-383
- Kostova, T., & Roth, K. (2002). Adoption of an organisational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1):215–233.
- Kostova, T., & Zaheer, S. (1999). Organisational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1):64–81.
- Krikorian. (2013). *Union of Greens of Armenia and Public Environmental Alliance: Open letter addressed to Global Gold corporation owner*. Armenia: Ecolor.
- Lupton, D. (1999). *Risk*. London: Routledge.
- Lydian. (2016). Lydian international news. Retrieved from: <http://www.lydianinternational.co.uk/news/2016-news> (Accessed 01/05/2016)
- Meyer, J.W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2):340–363.
- Meyer, K.E. (2001). Institutions, transaction costs, and entry mode choice in Eastern Europe. *Journal of International Business Studies*, 32(2):357–67.
- Meyer, K.E., Estrin, S., Bhaumik, S.K., & Peng, M.W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, 30(1):61–80.
- Miller, K.D. (1992). A framework for integrated risk management in international business. *Journal of International Business Studies*, 23(2):311–331.
- Mining Code. (2011). *Mining code of the Republic of Armenia*. Yerevan: Republic of Armenia.
- Mining Journal. (2011). *Armenia Mining Journal*. London: Aspermount.
- Morris, M., Kaplinsky, R., & Kaplan, D. (2012). *One thing leads to another: Promoting industrialisation by making the most of the commodity boom in Sub-Saharan Africa*. Cape Town: Self-published

- North, D. C. (1990). *Institutions, instructional change and economic performance*. Cambridge: Cambridge University Press.
- North, D. (1991). Institutions. *Journal of Economic Perspectives*, 5(1):97–112.
- North-South Road. 2017. North-South Road Corridor Investment Program, <http://northsouth.am/en> (Accessed 17/11/2017)
- Orr, R.J., & Scott, R.W. (2008). Institutional exceptions on global projects: A process model. *Journal of International Business Studies*, 39(4):562–588.
- Paremuzyan, L. (2015). Cancer screenings in Northern Armenian mining town reveal a growing health problem. Retrieved from: <http://hetq.am/eng/news/58871/cancer-screenings-in-northern-armenian-mining-town-reveal-a-growing-health-problem.html>
- Peng, M.W. (2003). Institutional transitions and strategic choices. *Academy of Management Review*, 28:275–296.
- Peng, M.W., Wang, D., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5):920–936.
- Prno, J., & Slocombe, D.C. (2014). A systems-based conceptual framework for assessing the determinants of a social license to operate in the mining industry. *Environmental Management*, 53:672–689.
- Puffer, S.M., McCarty, D.J., & Jaeger, A.M. (2016). Institution building and institutional voids. *International Journal of Emerging Markets*, 11(1):18–41.
- Rottig, D. (2016). Institutions and emerging markets: Effects and implications for multinational corporations. *International Journal of Emerging Markets*, 11(1):2–17.
- Scott, R.W. (1995). *Institutions and organisations: Ideas, interests and identities*. London: Sage.
- Transparency International. (2015). *Corruption Perceptions Index 2015*. Retrieved from: <http://www.transparency.org/>
- United Nations (UN) Global Compact. (2014). Retrieved from: <https://www.unglobalcompact.org/>
- Vergne, J-P. (2011). Towards and new measure of organisational legitimacy: Method, validation and illustration. *Organizational Research Methods*, 14(3):484–502.
- World Bank, (2012). *Fiscal Consolidation and Recovery in Armenia*. Vol 45. Berlin:World Bank Group.

- World Bank. (2014). *Country program snapshot: Armenia partnership*. Berlin:World Bank Group.
- World Bank. (2015). *Country program snapshot: Armenia partnership*. Berlin:World Bank Group.
- Williamson, O.E. (2000). The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature*, 38:595–613.
- Yin, R.K. (2003). *Case study research: Design and method*. (3rd edition). London: Sage.

7 Appendix

7.1 Interview Guide

1. Social and cultural change

1a. How would you characterise the change to the local community social and cultural life on a scale from 1 to 5?

1b. Do you think that the community has grown or become smaller as a result of the project? Why?

1c. Do you believe that there have been changes in the levels of crime or social order because of the project? E.g. corruption, domestic violence, sexual violence, substance abuse and trafficking, prostitution, or change in social norms.

1d. Is it your perception that community health has deteriorated or has improved since the start of the project? E.g. disease, vehicle accidents, spills, controlled release.

1e. To what degree do you believe that the project has affected the culture of the community? E.g. breakdown of traditional roles, changing production/employment base, community cohesion, effects of cash economy, sense of place, community leadership, cultural heritage.

1f. Do you think that the project has affected the ability of otherwise unproductive people to participate in local community life? E.g. disproportionate or particular effects on women, children, disabled, elderly, ethnic minorities, indigenous peoples, etc.

1g. In what way has the company been involved in these issues?

2. Economic change

2a. How would you characterise the changes to the local community economic situation as a consequence of the project, on a scale of 1 to 5 where 1 is a positive change, 3 is no change and 5 is a negative change?

2b. Do you think that people in the community are more or less economically equal because of the project? E.g. employment, compensation, training, profit flows, equitable distribution (across state/regional/local/ethnic/class/family or other lines).

2c. Do you believe that the community has become wealthier or poorer as a result of the project? E.g. royalties and taxes.

2d. Have you been able to buy more or less since the project started? Inflation/deflation: e.g. housing (ownership/rents), food, access to social services.

2e. Has access to good roads, electricity or telephones changed since the project started? E.g. demands on/investment in roads, rail, ports, etc.

2f. Have local businesses benefited from the project? E.g. procurement, quality, service areas.

2g. In what way has the company been involved in these issues?

3. Socio-environmental change

3a. How would you evaluate the project's impact on the daily lives of the local population on a scale from 1 to 5, where 1 is no impact and 5 is a big impact?

3b. How has the construction of the project affected the local community? E.g. pollution (source of or sink for), air (dust), water (acid and metalliferous drainage, cyanide, tailings seepage, riverine and submarine disposal), soil, noise, scenic amenity, vibration, radiation, traffic, etc.

3c. Have you experienced that you have more or less access to clean water and reliability of electricity supply? E.g. land, water (groundwater, river, ocean), mineral resources, cultural heritage, forest resources, human.

3d. Have you experienced that you or someone in the community needed to be resettled? E.g. consent and consultation in relation to resettlement, compensation, ties/relationship to land, equity, adequacy of resettlement housing and facilities, livelihoods.

3e. How has the project ensured that the community has given consent and been consulted in relation to land access? E.g. disruption (including exploration), frequency and timing, compensation.

3f. In your mind, has the company taken any grievances seriously and taken action to resolve these to the degree that they could?

3g. In what way has the company been involved in these issues?

4. Changes in politics and governance practice

4a. To what degree has the project made the local population become politically involved, on a scale from 1 to 5, where 1 is less involved, 3 is the same and 5 is more involved?

4b. Do you think that the local municipality has been adequately involved in the decision-making? E.g. political, local governance, contracts, devaluation of currency, tax collection, conflict resolution.

4c. Do you believe that the project is legal? E.g. legislation, permits, courts' impartiality, enforcement.

4d. Do you believe that the process of expropriation was conducted in a transparent way? E.g. protection, compensation, court system.

4e. Have you experienced any demonstrations or violent actions in relation to the project?

4f. In what way has the company been involved in these issues?

5. The process of change

5a. When the project was presented to the local community, how do you believe the community reacted? Answer on a scale of 1 to 5, where 1 is positively towards the project effect, 3 is the project will have no effect on the community, and 5 is the project will mean a negative change for the local community.

5b. Did you give your consent to the project? E.g. sovereign consent, community consent.

5c. Did you participate in the planning phases of the project and did you feel heard? E.g. development of programmes, monitoring, selection of alternatives and technologies, planning operational aspects.

5d. Do you think that individual disputes were resolved by all parties affected? E.g. dispute resolution, company level grievance mechanisms, accessibility, transparency, dialogue and engagement, third party mechanisms.

5e. In what way has the company been involved in these issues?

7.2 Transcribed Interview

Armenian may 2015 (Anonymized interview including guide questions)

1. Social and cultural change

1.a. How would you characterize the change to the local community social and cultural life from a scale from 1 to 5 where one signifies no change and five is a major change?

The change to the local community social and cultural life is a positive 2. GPM Gold company had organized several, small amount of cultural events.

1.b. Do you think that the community has grown or become smaller as a result of the project? Why?

The community has become smaller as a result of the project, because many families had moved from Ararat village to Zod village for work purposes, therefore, the population of Ararat village had definitely decreased. This was conditioned by the growth of Ararat village's population, e.g. 2-3 families were living in 1 house, including 2 men with their families. Ararat village didn't have possibilities for expansion, consequently, the employees left for work in Zod village and received houses, and this resulted in reduction of Ararat village's population. Young families were migrating from Ararat village to Zod village. Most probably, 30% of those who migrated to Zod village were from Ararat village.

1.c. Do you believe that there have been changes in the levels of crime or social order because of the project?

Due to project, there was a lower possibility that those community members who were employed by Zod village would be less inclined to corruption, domestic violence, sexual violence, substance abuse and trafficking, prostitution, conversely, idle people would be more inclined to aforementioned changes of social order and levels of crime, e.g. drug addiction, alcoholism.

1.d. Is it your perception that the community health has deteriorated or has improved since the start of the project?

Based on the meetings and discussions with Ararat community, they have checked that Zod factory didn't properly perform the cleaning procedures and in most cases the poisoned emissions were not cleaned and harmed the agriculture of Ararat village, there had been cases of cows' diseases and animals' deaths, because near Ararat village there was a tailing of Zod company, from this tailing the emissions were directly penetrated into the soil and resulted in

soil degradation. The emission cleaning procedure was poorly performed during recent years; during Soviet times, there was high consistency and tonnes of bleach were used to clean and neutralize the cyanide, but currently the company was owned by foreign organization and they neglected the proper cleaning processes. The birds were sitting on polluted water and dying, most probably that was conditioned by the heavy metals, which had very negative impact on health, e.g. tumor was widely spread disease in Ararat village, it had massive character and the detected cases of 1,5, 3, 6 years old children' cancer weren't coincidences. In reality, in case of Ararat village populations' health diagnosis there would be higher number of health deterioration and many of GPM Gold's employees couldn't have children, as a result of GPM Gold's activities. The absence of proper cleaning procedures of toxic substances affected generations, especially during recent years the negative impact had increased.

I.e. To what degree do you believe that the project have affected the culture of the community?

Zod factory provided certain support to Ararat village, but only to veterans of Great Patriotic War and disabled children. Ararat village had 3 veterans and 15 disabled children, every veteran received 30,000 AMD lump sum support on May 9-th (day of Great Patriotic War) and every disabled child received 10,000 AMD lump sum support on June 1-st (International day of children), previously, the disabled children also received a package of sweets, but since recent times they weren't provided with sweets anymore. The company paid land tax, which it was ought to pay for their occupied land and there was a serious mistake in the company's taxation, since the company paid land tax directly to Ararat village Municipality, while the tax for property, plant and equipment on that land was paid directly to Ararat city Municipality. Nowhere in the world such taxation rules would be applied, since the land couldn't be the property of Ararat village Municipality, while the property, plant and equipment on that land belonged to Ararat city Municipality. In 2012 GPM Gold Company promised to provide a bus to Ararat village but since then nothing had been provided. When the Soviet Government built the Zod factory, the Government took 700 ha of Ararat village's land; afterwards, this factory was reorganized as Gold Union, which owned this 700 ha of land, following the collapse of Soviet Union and the independence of Armenia. In 2006 this area was included in assets section of Ararat city Municipality's balance sheet; as a result, Ararat village lost 700 ha of land. Since 2011 Zod factory was the property of Russian-Georgian joint company. GPM Gold didn't provide significant support to Ararat city and several times Ararat village Municipality applied with various questions, but didn't receive any support. GPM Gold hired employees from Ararat

village in a few cases, only whenever the Mayor of Ararat village was directly involved in recruitment process of those employees. GPM Gold had its own group of employees and the community members of Ararat village had extremely low involvement rate. In 2012 the environmentalists raised some concerns, at that time, GPM Gold made some promises. The smartest youth of Ararat village should have been selected and sent to training and education in Russia, finishing their education they would become the future employees of Zod factory, this project was successfully launched during first year and then it stopped, there were total of 3 people selected, one person was selected from Ararat village, one person from Ararat city and another one from nearby community. One person from Ararat village went to study in Russia, he was my nephew, but no any friend-relative relationships affected the objective decision of selecting this specific young man, he was selected because of successfully passing the exams. My uncle told that he was a 3-rd year student of Leningrad Mountain Metallurgy University. GPM Gold Company provided 400 USD monthly scholarships to selected candidates and signed a future work contract with them. These candidates would be more competitive in international markets and would receive 10 times higher salaries abroad. GPM Gold hired limited number of employees from Ararat village but I'm were not aware of company's staff recruitment policy. The company made very strict staff recruitment and mostly signed 2-3 months temporary contracts with its employees, afterwards, if these employees protested or the company disliked them, the company wouldn't prolong these employees' temporary contracts or sign new temporary 2-3 months contracts with them. GPM Gold company was an international organization and was implementing different policy and it wasn't similar to Armenian organizations, therefore, you couldn't anyhow affect their decision-making process. The employees of Ararat village Municipality had talked to employees of Zod factory and told them that they should protest because of overtime work and comparably lower salaries; the employees responded that in case of any protests, after the end of limited term contract, the company wouldn't hire them anymore. This raised concerns that the company was signing illegal contracts with their employees, it didn't provide day-offs, vacation payments, bonuses, instead they signed temporary contracts and after 2 months didn't prolong contracts with its employees. The company didn't operate in accordance to RA Labor Code, conversely, as a foreign institution it operated based on its personal interests only. Following the collapse of Soviet Union and the Independence of the Republic of Armenia, in 1994 Zod factory was sold to Canadians. During Canadian administration the working conditions were quite good; the employees were paid comparably higher salaries and received additional payments for any

additional minute spent in company. The Canadians sold the factory to Indians in 2001 and the Indians totally destroyed the factory. The Zod factory was under Indian ownership till 2010. During Indian administration the company hired workers from India, instead of hiring very competent and experienced Armenian employees, e.g. the company paid 2000 USD monthly salaries to Indian employees and only 200 USD monthly salaries to Armenian employees for similar job. He had a discussion with his neighbor, who was an employee of Zod factory, the neighbor mentioned that whenever machinery broke down, Zod factory ordered the new parts of the machinery from abroad and paid 2000 USD, instead of buying similar parts in Armenia and paying 200 USD. According to agreement between RA Government and Zod factory, the company and RA Government would receive certain percentages of annual profit, the respondents thought that the gold extraction company would definitely earn profits and they showed such exaggerated expenses for reducing its annual profits, therefore, paying less to Government, e.g. the company purchased high quality pumps from abroad, which were 10 times less productive than Armenian pumps. Most proportion of the profit stayed within company, while state budget received very small amount of profit, especially during Indian administration, consequently, the company exploited its employees. The company paid around 2,000,000 AMD annual taxes. The Soviet Government discovered gold mine in Vardenis region, conditioned by Sevan lake issue and availability of many employees in Ararat region, Soviet Government decided not to build a factory in Vardenis region, instead they established a factory in Zod village. During Soviet Union, Zod factory imported main raw materials from Kazakhstan, Uzbekistan. Currently company used local raw materials. Although the factory was located very close to Ararat village and the villagers felt direct negative impact, but Zod factory didn't provide any support to Ararat village. The administration of GPM Gold Company visited Ararat village, 10 days prior to our interview, when villagers asked about the promised bus, the company replied that they have already renovated the ceiling of Ararat village's kindergarten and didn't have sufficient financial resources to purchase the bus. The project had definitely affected the culture of the community, when the community members worked in Zod factory their welfare level increased, which improved the cultural life of community. The company didn't sponsor any kind of cultural events in Ararat village. It didn't organize any kind of events, besides creating workplaces.

1.f. Do you think that the project has affected the ability of otherwise unproductive people to participate in local community life?

GPM Gold Company created workplaces for both males and females, but he couldn't definitely state that the project had contributed to solution of women's unemployment issue in Ararat village and had affected women's ability to participate in local community life. Such works as janitor and other works were mostly occupied by women and the company didn't imply any discrimination. Soviet Government established Banavan community along with Zod factory, where the employees of factory lived. In addition, Soviet Government also built kindergarten, hospital, cultural house, separate school, therefore, creating more favorable conditions for women to balance work-family life. During Soviet times, Banavan was a very active community, but currently Banavan was part of Ararat city and the local programs were supported by the budget of Ararat city Municipality. Zod factory only donated several garbage collecting cars to Ararat city Municipality. The women didn't receive any additional privileges other than stated by RA Labor Code. The women were also working in police department of Ararat city, but the respondents couldn't tell whether there were equal opportunities for all women and men or the jobs offered favourable conditions for women and they told that only employees themselves could answer to such questions. During Soviet Union, there was a planning economy and the Government decided that the gold processing factory should be established in Zod village, therefore, Government built 4-5 5-floor buildings, including Zod factory, the residential building for employees of Zod factory. The full capacity of Zod factory was 1500-2000 employees. Currently there would be around 3000 residents in Banavan community. During Soviet Union, the community little by little increased and it was transformed into a very viable community, although Banavan's population was less than Ararat village's population, but it had its own beautiful cultural house, kindergarten, hospital, cinema and the members of Banavan community were provided by all possibilities to organize their work-leisure time, they were earning higher salaries than Ararat village community, they were earning monthly salary of around 150-170 rubles, but their welfare level had also decreased due to current bad situation of Armenia.

Currently RA Ministry of Defence occupied kindergarten building, club, hospital building and transformed them into a military base, e.g. there were only several rooms in the entire hospital, which served the population of Banavan, while the remaining rooms were the property of military base, the club wasn't operating, since it had been transformed into military base after Vazgen Sargsyan. According to a project, Banavan community was going to be transformed into a military community. During 1990's movements, around 10 houses of Kurds left Ararat village, 4-5 houses of Azeris left Ararat village. Currently there were 1 Kurd family, 10-12 Jews and 2

Russians in Ararat village. Ezdis were the largest ethnic minority of Ararat village, he couldn't recall the exact number of ezdi, it was stated that they were leaving the village, not due to indigenous people's pressures, but similar to Armenians, who migrated to work in Krasnodar, Kalinigrad, these areas were reach of lands. Ezdis were also migrating to Germany. Ezdi's remained registered in Ararat village, but mostly stayed in Russia, because of high demand of labor. Ezdis were enrolled in animal husbandry, but nowadays animal husbandry in Armenia was a serious issue. In 1991 according to land ownership law, the lands were divided and there were farmers who lacked lands and had to rent others' lands. GPM Gold Company didn't provide any support to ethnic minorities of Ararat village; but could hardly recall 1-2 ethnic minorities working in Zod factory.

1.g. In what way has the company been involved in these issues?

The company didn't participate to development of Ararat community, the company was invited by Ararat village Municipality to various events, but the company rejected the invitations, they showed evasive behaviour. In response to villagers' concerns of bus, the company again asked for a written request from Ararat village Municipality, therefore, the company could discuss this request on June 1-st. Telling that the solution of this issue had an important strategic role for the village. Once the company's administration visited Ararat village and forced disabled children to personally come to Ararat village Municipality and receive candies, total price of 1000 AMD, which was very humiliating, instead the company representatives should one by one visit every disabled child and provide him/her the candy boxes. When on May 9-th the company provided 30,000 AMD support to every veteran, the employees of Ararat village Municipality told that there were also veterans of Afghanistan war, since they had also served in Soviet Army, but the company rejected to provide any support to those veterans and replied that only veterans of Great Patriotic War would receive 30,000 AMD support. All 3 veterans had various health issues, therefore, soon the company wouldn't even have to pay those 30,000 AMD. The company was only showing that they cared about Ararat village, but they didn't really care about Ararat community, since they were a gold processing company and would definitely earn several millions of annual profit, but didn't spend any penny on community development and ignored the community.

2. Economic change

2.a. How would you characterize the changes to the local community economic situation as a consequence of the project from 1 to 5 where 1 is a positive change 3 is no change and 5 is a negative change?

From economical perspectives the company had comparably higher positive impact on community, since the company hired around 80-100 employees from Ararat village, if Zod factory was closed, 100 families would be unemployed. Currently the economic situation of Ararat village was satisfactory, while 15 years ago the employees of Zod factory enjoyed higher standard of living, since they were earning comparably higher salaries, e.g. in 1996, 1997 the laborers were earning monthly net salary of 150,000 AMD, compared to current monthly net salary of 120,000 AMD. Considering salary decrease, we couldn't state that there was a growth, just the economic situation of Ararat community wasn't terrible, and thus, He estimated overall impact of the project as positive 3 (i.e. no change). He was working as a teacher in local school and she remembered of earning 7000 AMD monthly net salary, while currently teachers' monthly net salary was 70,000 AMD, consequently their salaries had increased 10 times.

2.b. Do you think that people in the community are more or less economically equal because of the project?

Total number of employed members of Ararat community is such low that definitely the company couldn't impact the whole community. Ararat village had 2,500 families (total population of 8,700 people) and 1,500 houses (households). Most of community members were enrolled in agriculture, animal husbandry, they were cultivating their land, and around 100 members of Ararat community were employed by Ararat cement factory. Around 100 community members were employees of Zod factory but it was not such predominant number that would affect the economic equality of Ararat community. Even if GPM Gold increased the salaries of those 100 people, it would not have significant impact on whole community. There were some families in Ararat village, whose welfare level had substantially improved as a result of the project, since some of them were highly paid specialists, but this was a narrow impact on that family only and couldn't be spread on the economic situation of the whole Ararat community. The "unemployed" term in village context was considered a bit differently, since the villagers had their own land and could cultivate it and the land was considered as the main source of income for villagers.

2.c. Do you believe that the community has become wealthier or poor as a result of the project?

The company didn't pay high taxes to Ararat village budget, it only paid 2,000,000 AMD annual land tax for exploiting the tailing. In general, we couldn't state that GPM Gold Company had very bad influence on Ararat community, although there were such questions that, on the one hand, the company didn't follow the environmental regulations, on the other hand, there were issues related to salaries and the company's participation to Ararat community's social, economic, cultural life. Anyway, for every member of community the Zod factory was reliable, registered employer, at some extent, the company solved issues, especially given current high unemployment rate. Another issue was that the company didn't fairly behave with Ararat community members, but he agreed that the company created workplaces and its further work was necessary for the community. GPM Gold would pay around 100,000,000 AMD annual taxes to Ararat city budget, but couldn't state whether the company would fairly pay full taxes or not. He brought the example of Ararat cement factory, since it occupied huge territory, but most of the land was not shown in documents. Ararat cement factory had to pay 300,000,000 AMD annual taxes, instead it always paid 79,000,000 AMD annual taxes only and in fact it caused huge losses to both Ararat city and the country. There were discordances between Ararat city Municipality and Ararat cement factory, most specifically, the administration of Ararat cement factory stated that some of the territory was used for agricultural purposes, but in reality, the factory implemented production activities on that specific territory of land.

2.d. Have you been able to buy more or less after the project started?

Zod factory reduced its employees' salaries, while the prices of goods and services increased, therefore, the community members' economic situation worsened. There is around 18% annual inflation in Ararat village.

2.e. Has access to good roads, electricity or telephones changed after the project started?

The road to gold mines of GPM Gold Company was passing through Ararat village, therefore, the company could at least renovate the road, since mostly company's heavy trucks and employees would use that road, it would be logical for the company to renovate this road once in several years, while the company didn't make any investments in this road, instead it unsparingly used the road.

2.f. Has the local businesses benefitted from the project?

GPM Gold Company was large taxpayer, thus, all questions were solved by Yerevan, and the company was directly accountable to central tax body of the Republic of Armenia. Since GPM Gold Company was an international company, therefore, it was rational to assume that

international organizations would win company's procurement tenders, only in some small cases, local business might win the tenders.

The company would provide the publicity of procurement tenders, but couldn't tell whether the decision process was fairly conducted or not. Since the company used ATM machines of various banks in Ararat city, thus, thought that it would benefit local businesses, thereby contribute to money flow in economy. During Canadian administration, around 10 years ago, Zod factory had canteen and even employees were given additional money in the form of coupons, which they could either use to buy food in canteen or exchange them for cash.

3. Socio- environmental change

3.a. How would you evaluate the projects impact on the daily lives of the local population from a scale from 1 to 5? Where 1 is no impact and 5 is a big impact?

The project had very destructive impact on the community; therefore, he evaluated the projects impact on the daily lives of the local population as negative 5. The company wasn't using any neutralizing materials. He had discussions with employees of Zod factory and the employees told that in many cases when the ecologists were coming to check the state of plant, several days before their visit, the company asked their employees to collect those birds, which were dead because of standing on polluted water, thus, the ecologists wouldn't notice the dead bodies of birds. In reality, neither birds could stand on polluted water nor could any fish survive in those waters. The employees had various diseases, due to project's negative impact on ecology. There were so many diseases in Ararat village that you were surprised, on the one hand, there were resulting from the use of cyanide for gold refining purposes, on the other hand, the company didn't use any neutralizing chemicals (e.g. bleach) to neutralize cyanide. According to special procedure, the gold was refined from concentrate through the use of cyanide and the waste was concentrated near Eraskh River and those territories were the ownership of Ararat village Municipality and the Municipality granted usage rights of some part of that territory. The local shepherd accidentally used those lands for its sheep grazing purposes and all sheep were dead and he had complained to Ararat village Municipality. The Municipality was enrolled in this dispute as a stakeholder and invited the employees of Zod factory to a discussion, the employees of Zod factory proved that the sheep entered the company's territory; the company had installed warning notification, which stated that the sheep grazing in this territory was prohibited. The employees of company didn't tell that the territory was not poisoned; they just told that the

shepherd was prohibited to enter that territory with his sheep; consequently, He told that the company accepted that the territory was poisoned and emitted by toxic materials.

3.b. How has the construction of the project affected the local community?

Zod factory didn't use any neutralizing chemicals to neutralize the toxic waste, in other words, the company was gaining both from using cheap chemicals for gold refining and not neutralizing the cyanide. Conversely, the company stated that it was not earning satisfactory level of profit. The Mayor of Ararat village Municipality invited Zod factory to meeting. During meetings, they discussed the issue of bus, the Mayor reminded them of promised bus and added that this bus would neither be used for the pleasure of Ararat community nor for earning side income. There were many students and the village would need more than 1 bus. At least that 1 bus would transfer those students and Ararat village Municipality would cover the gasoline expenses. That the company provided negligible support to Ararat community, compared to its size and the negative impact on environment, might be the case that the Mayor of Ararat village Municipality didn't have enough permissions or was internally told not to pressure Zod factory, but if an independent environmental group analyzed the company's activities, the company would be fined millions of dollars. The villagers should protest to higher governmental bodies, but those bodies were tacit. Taking into consideration the abovementioned facts, Zod factory should try to support Ararat village, instead no any support had been provided, besides satisfying the requirements of law. According to interviewees, the company was mainly enrolled in mining activities; therefore, the villagers didn't feel noise, vibration, radiation or traffic resulting from construction of the project.

3.c. Have you experienced that you have more or less access to clean water and reliability of electricity supply?

We have definitely experienced less access to clean water and reliability of electricity supply. Concerning supply of clean water, Zod factory was using Garni reservoir's water, since only pure clear water was required for implementing the refining and other procedures in Zod factory, therefore, in order to satisfy the population's overall demand of drinking water, the Government had to mix Garni reservoir's water with waters from other sources and impose time schedule for water supply. Although the mixed water of other sources was safe, but its quality wasn't coinciding to qualitative indicators of previously supplied water. The Government had to implement such activities for satisfying the population's overall demand of drinking water; consequently, the activities of Zod factory also hindered the population's supply of clean water and reliable electricity.

3.d. Have you experienced that you or someone in the community needed to be resettled?

No, Ararat villagers didn't need to be resettled. Initially, the territory of Zod factory (700 ha of land) was desolate land.

3.e. How has the project ensured that the community has given consent and been consulted in relation to land access?

The company didn't provide any compensation or consultation to Ararat village, at initial phases of operations; the company didn't even know the exact location of Ararat village. As a result of company's activities, the lands were eroded, vineyards and orchards were dried.

3.f. In your mind, has the company taken any grievances seriously and taken action to solve these to the degree that they could?

The company didn't take any grievances seriously and actions to solve these to the degree that they could, the typical example was previously brought example of sheep, even if the sheep accidentally appeared in the territory of Zod factory, the company didn't undertake any steps to support the shepherd, they could tell that although it's shepherd's fault and he encountered loss of 1,000,000 AMD (random number brought by interviewees), but the company would provide him 100,000 AMD financial support as humanitarian aid. If the company didn't have any issues or gain anything, they wouldn't undertake actions to support Ararat village, e.g. recently there were some issues with the company's activities, most specifically, there was a conflict between one of Ararat villagers and Zod factory, the villager owned 100 ha of land and built a lake in his territory, accidentally 0.5 ha of lake territory appeared to be the ownership of Zod factory, therefore, the company conducted a meeting with this villager. Ararat village Municipality visited the villager's lakes, made investigations and conducted meeting between Ararat village Municipality, the villager and the company. The Municipality facilitated the common agreement between affected parties, but the company didn't take any further steps to improve the wellbeing of Ararat community, they simply used the power of law to solve their issues.

4. Changes in Politics and Governance practice

4.a. To what degree has the project made the local population become politically involved from a scale from 1 to 5? Where 1 is less involved, 3 is the same and 5 is more involved.

The members of the community of Aarat village weren't involved in Zod factory's policy making process; therefore, they couldn't have any impact on company's policy. The company conducted public hearings 2 years ago, since factories similar to Zod, according to law and the

company's policy, had to mandatorily conduct public hearings in affected communities (including Ararat village), before making decisions of environmental importance. Environmental organizations also participated to public hearings, but this was the only public hearing conducted in Ararat village. The company should consider the publicity of its actions, therefore, involve Ararat village as affected stakeholder and inform Ararat village about company's further activities, but besides the public hearings, which were conducted 2 years ago, the company didn't involve Ararat village as affected community. He estimated local population's political involvement as positive 2.

4.b. Do you think that the local municipality has been adequately involved in the decision making?

We do not think that Zod factory cooperated with Ararat village Municipality, therefore, the local municipality hadn't been adequately involved in the decision making, but the respondents couldn't state whether that was legally required for company or not. He raised concerns that Zod factory wasn't operating in accordance to RA Labor Code, one of the respondents told that in 2014 she was working in an organization similar to Zod factory and while she was pregnant and asked for maternity leave the organization rejected her request. The organization conditioned their reply by the fact that they were financed by World Bank and World Bank was not providing social payments, conversely, the respondent told that she was very well aware that there were no such practices in the world. Going back to our discussion of Zod factory, the respondents told that it was prohibited by RA Labor Code to fire employees on an annual basis and then hire same employees again every year.

4.c. Do you believe that the project is legal?

He thought that the activities of Zod factory were legal and coincided to requirements of law. The company wasn't a newly established one, it had many years of history and therefore, the respondents couldn't hesitate about its legality. OHe told that it was neither under the scope of her authority, nor she was competent to discuss this question.

4.d. Do you believe that the process of expropriation was conducted in a transparent way? e.g. protection; compensation; courts system.

The mine was already established in the soviet period.

4.e. Have you experienced any demonstrations or violent action in relations to the project?

No, he didn't experience any demonstrations or violent actions in relation to the project. There were small discordances between environmental NGO's and Zod factory before 2012, the

disputes were mostly related to tailing, most specifically, there were concerns that the company implemented open pit mines, which was very dangerous. Zod factory conducted a public hearing 2 years ago, the public hearing was related to construction of processing facilities in the territory of tailing. The company promised to follow all safe environmental regulations during construction works. Although the company announced to create 200 additional workplaces, but he thought that Ararat villagers will organize big demonstrations against the construction of processing facilities in the territory of tailing, but in fact nothing happened.

5. The Process of Change

5.a. When the project was presented to the local community how do you believe the community reacted? Where 1 is positive towards the project effect, 3 the project will have no effect on the community and 5 the project will mean a negative change for the local community.

Zod factory was one of the projects implemented in the framework of Soviet Union's economic planning, consequently, Ararat village Municipality or collective farms couldn't participate to decision making process and consequently this question lost its importance. Although whole population of Armenia was excited with exploitation of Zod factory, but in future Ararat village lost 700 ha of land, which substantially reduced the income of Ararat village budget, as a result, the village experienced huge losses rather than winning anything.

5.b. Did you give your consent to the project? e.g. sovereign consent; community consent;

The Soviet Union gave its consent to the project.

5.c. Did you participate in the planning phases of the project and did you feel heard?

Irrelevant

5.d. Do you think that individual disputes were resolved by all parties affected?

There were disputes related to cyanide polluted lands, the livestock was died, because of grazing in those fields. In general, Ararat village Municipality could solve all issues through discussion with administration of Zod factory. Every Thursday, the Mayor of Ararat village was having a discussion with CEO of Zod factory and Mayor was directly reporting all emergency cases to him.

7.3 Coding example

Example of coding captured under the heading Economic changes related to standard of living including concerns of changes to economic welfare, Health and about the risk of fatality, income short/long-term, resettlement and social order impact due to the presence of the extractives industry.

[<Internals\\Interviews\\Trans Ararat village Municipality>](#) - § 6 references coded [5,03% Coverage]

Reference 1 - 0,64% Coverage

The community has become smaller as a result of the project, because many families had moved from Ararat village to Zod village for work purposes, therefore, the population of Ararat village had definitely decreased.

Reference 2 - 0,90% Coverage

This was conditioned by the growth of Ararat village's population, e.g. 2-3 families were living in 1 house, including 2 men with their families. Ararat village didn't have possibilities for expansion, consequently, the employees left for work in Zod village and received houses, and this resulted in reduction of Ararat village's population

Reference 3 - 0,98% Coverage

Due to project there was a lower possibility that those community members who were employed by Zod village would be less inclined to corruption, domestic violence, sexual violence, substance abuse and trafficking, prostitution, conversely, idle people would be more inclined to aforementioned changes of social order and levels of crime, e.g. drug addiction, alcoholism.

Reference 4 - 0,83% Coverage

The company paid land tax, which it was ought to pay for their occupied land and there was a serious mistake in the company's taxation, since the company paid land tax directly to Ararat village Municipality, while the tax for property, plant and equipment on that land was paid directly to Ararat city Municipality.

Reference 5 - 0,87% Coverage

The Zod factory was under Indian ownership till 2010. During Indian administration the company hired workers from India, instead of hiring very competent and experienced Armenian employees, e.g. the company paid 2000 USD monthly salaries to Indian employees and only 200 USD monthly salaries to Armenian employees for similar job.

Reference 6 - 0,80% Coverage

The administration of GPM Gold Company visited Ararat village, 10 days prior to our interview, when villagers asked about the promised bus, the company replied that they have already renovated the ceiling of Ararat village's kindergarten and didn't have sufficient financial resources to purchase the bus

[<Internals\\Interviews\\Trans Gndevaz village>](#) - § 1 reference coded [0,58% Coverage]

Reference 1 - 0,58% Coverage

Jobs are god but what about the population?

<Internals\Interviews\Trans Mayor of Kajaran city> - § 6 references coded [5,40% Coverage]

Reference 1 - 0,31% Coverage

Kajaran cityconditioned its future with the activities of company.

References 2-3 - 1,18% Coverage

Even in such communities as Kajaran city, the increased financial resources resulted in increasing negative impacts on community. Given insufficient social conditions in community, the improvement of social conditions would definitely result in crime.

Reference 4 - 1,86% Coverage

The increased welfare level resulted in increase in crime level, there was an increasing risk of drug abuse and crime in Kajaran city, conditioned by both community members of Kajaran city or outside communities (that were far and were not earning any benefits from mining activities).

Reference 5 - 0,96% Coverage

Definitely the project had very positive impact on otherwise unproductive people's participation in local community life, most specifically; women were also employed by Zangezur Copper Molybdenum Company.

Reference 6 - 1,09% Coverage

Zangezur Copper Molybdenum Company was not a conventional enterprise, it was very big, significant enterprise for both Armenia and the Caucasus and the company was one of the world's largest owners of copper and molybdenum deposits.

<Internals\Interviews\Trans Mayor of Teghut village Municipality> - § 16 references coded [31,00% Coverage]

Reference 1 - 0,86% Coverage

The villagers didn't feel it yet, they felt this way since the mine had just been exploited and added that in future there might be some changes in this matter.

Reference 2 - 0,91% Coverage

During the meetings Valex Group was informing about its activities and the villagers might raise their issues and discuss them directly with the employees of Vallex Group.

Reference 3 - 1,01% Coverage

The interviewees thought that the villagers became economically equal, there were no people in terribly bad economic situation, conversely, no one enjoyed extremely high standard of living.

References 4-5 - 1,42% Coverage

Vallex Group directly paid the land rent taxes to budget of Teghut village municipality. The company paid 2 types of taxes: land rent tax and land tax for their own lands. The annual land rent tax and annual land tax were 12,000,000 AMD and 645,000 AMD accordingly.

Reference 6 - 0,36% Coverage

In general, the quality of goods and services had slightly improved.

Reference 7 - 1,44% Coverage

During construction works, the noise of explosion had also been heard, because of its close distance from Teghut village and which also resulted in wall cracks of houses, but the exploitation noise, during exploitation of mine, hadn't been experienced by local community.

Reference 8 - 0,41% Coverage

2-3 families rented houses in Teghut village, in order to work in Teghut mine.

Reference 9 - 0,51% Coverage

There had been 2 registered cases of local villagers being against the activities of Teghut CJSC

Reference 10 - 7,85% Coverage

The village was united and the villagers twice had blocked the road and informed Teghut CJSC that the company had to take into consideration the villagers' opinion. There hadn't been registered any cases, when Teghut CJSC implemented rude power and enforced the local villagers to settle the demonstrations. In both cases, the Honourable Governor and the Head of police department of Lori region had a meeting with the participation of both local community members and the administration of Teghut CJSC. The Governor discussed the issues with local villagers and following the company's decision to resolve the disputes, villagers opened the road. The Head of Teghut village Municipality also participated to both demonstrations, not as the Head of Municipality, but as the community member of Teghut village. The court was mostly impartial, the Head of Teghut village Municipality told that prior to his administration the court made a wrong judgement, in favour of Teghut CJSC, some of the local villagers' houses had been recognized as the Interest of State Priority and provided to Teghut CJSC. The Head of Teghut village municipality recalled the case with Alikhanyan's family from Shnogh village, most specifically, one of the two brothers made the documented sale of his land to his brother, but currently the family, which sold that land insisted the contrary, this family told that they hadn't sold the land and would like to sell that land to Teghut CJSC at higher price.

Reference 11 - 1,23% Coverage

The areas of prevailing social interest had been estimated as 420,000 AMD for 1000 ha of land, which was lower than their cadastre price, for the same period of time the cadastre price for 1000 ha of land amounted to 2,200,000 AMD.

Reference 12 - 0,23% Coverage

Teghut village experienced 2 demonstrations

Reference 13 - 10,34% Coverage

One of them was related to a dispute between the community members of Teghut village and the employees of Vallex Group, the other dispute was related to the issue of workplaces, most specifically, Vallex Group hired and transferred employees from other villages through buses, conversely, whenever the community members of Teghut and Shnogh villages were applying for work in Vallex Group, they were being told that the company didn't have vacant workplaces. The first demonstration was initiated by the community members of Teghut village, while the second one was initiated by joint efforts of community members of Teghut and Shnogh villages. There was also dispute related to the fact that Teghut CJSC installed gates in their first and second check-in points and the villagers couldn't freely visit their sanctuary, they were complaining that every time for visiting their sanctuary, they had to apply to the village Head and only after getting his permission, they could visit their sanctuary. The community members of Teghut village shaftly added, that it wasn't the Western and Eastern Armenia. According to an agreement between Teghut CJSC and Teghut village municipality, although Teghut CJSC kept its check-in points, but it provided pass-cards and enabled the community members of Teghut to visit their sanctuary, nevertheless, the village Head wasn't sure that in near future Teghut CJSC wouldn't insist that the villagers initiated disorders and wouldn't permit the local community members to visit the sanctuary. The village Head stated that Teghut CJSC

conditioned the need of check-in points by security reasons, but it was very difficult to drive through Teghut village and encounter the check-in points on the road to sanctuary. The village head added that, due to change of generation, the community members might not feel connected with sanctuary anymore and they would feel less frustrated about the issue with check-in points.

Reference 14 - 1,56% Coverage

The exploitation of Teghut mine began in the end of 2004, at that time Teghut village was in socially grave situation; therefore, the Government of the Republic of Armenia didn't taking into consideration the negative impacts of many projects and implemented them in order to create workplaces.

Reference 15 - 0,82% Coverage

The villagers of Teghut also gave their consent to the exploitation of Teghut mine for contributing to repatriation of their relatives to their hometown.

Reference 16 - 2,07% Coverage

The Teghut village Head mentioned that in 2004 he hadn't been the village Head and added that it was natural that if the villagers gave their consent, then the village Head would also support them, during 2004-2012 the current Mayor of Teghut village was working in Mountain Metallurgy Institute of Vallex Group as drilling operator, since 2012 he had been elected as Teghut village Head.

[<Internals\Interviews\Trans Saravan Village Municipality>](#) - § 3 references coded [6,53% Coverage]

Reference 1 - 2,99% Coverage

Regardless of the huge taxes paid to community budget, they had built a new bathroom and kitchen for the school and were planning to totally renovate the building of Saravan village municipality; village road would be asphalted, within the framework of Geoteam CJSC's 2015 activities. Due to the taxes paid by the company, the Saravan village municipality purchased tractors, lawnmowers, grass press machines, plough, combine. Geoteam CJSC transferred the salaries to employees' cards; the company cooperated with Ardashinvest bank and AgbaCredit Agricol bank, therefore, there were no effects of cash economy. Currently most of the employees transferred their bank accounts to AgbaCredit Agricol bank, because the bank had a branch in nearby Vayk city.

Reference 2 - 1,41% Coverage

The budget of village municipality was such small, that it couldn't create equivalent opportunities otherwise. Given the limited budget of village municipality, they wouldn't be able to purchase so many equipment, there were huge areas of arable lands but was no any ploughing of land and the land was fallow, due to absence of combine in Saravan village.

Reference 3 - 2,13% Coverage

Compared to prior times, the welfare level of community members improved, on average, all social groups were almost equal, several years ago, villagers might even not be able to purchase bread, they would accumulate debt, but currently there was boost of lending operations in the village and loan applicants were able to pay out their debts and there were no any pending debts, the villagers worked, earned their monthly salaries and along with loan installments, they renovated their houses, purchased furniture and household goods.

[<Internals\Interviews\Trans Save Teghut>](#) - § 4 references coded [2,30% Coverage]

Reference 1 - 0,72% Coverage

There was also impact on agricultural quality. The change is happening as social change and this is already happening.

Reference 2 - 0,32% Coverage

Research shows that poverty is becoming more extreme

Reference 3 - 0,76% Coverage

Another problem is the pool (environmental fund) that collects all the environmental taxes and decides if who gets a cleanup.

Reference 4 - 0,51% Coverage

But it does not mean that the company who pays also cleans up their local community.

[<Internals\\Interviews\\Trans Vallex>](#) - § 9 references coded [10,43% Coverage]

Reference 1 - 0,98% Coverage

It was disclosed a month and a half ago at the end of match. It is called social impact assessment

Reference 2 - 1,44% Coverage

I could not say that there haven't been any change. There has been some changes to the health care. Could not say that it is one or the other. -

Reference 3 - 1,30% Coverage

Absolutely. The community has now a paved road. There is excellent mobile coverage, substantial improvement of internet connection.

Reference 4 - 2,21% Coverage

We encourage local businesses to supply us, we give them an advantage. If we have two proposals for meat, eggs, cheese local communities get certain advantages. That extends to local communities but also to a larger region.

Reference 5 - 0,85% Coverage

Otherwise there has been no impact and during production we do not expect any impact.

Reference 6 - 0,97% Coverage

No absolute. We did purchase quite significant areas of land but there has been no resettlement.

Reference 7 - 1,00% Coverage

Land access? This is owned land and the community has no access to that because that is industry area

Reference 8 - 1,22% Coverage

Not violent actions but demonstrations few here and in Yerevan. There were some with the pressure from Yerevan some people.

[<Internals\\Interviews\\Trans Vardan Vardanyan Ministry of Energy and Natural Resources>](#) - § 8 references coded [16,01% Coverage]

Reference 1 - 1,03% Coverage

The villagers were planting potatoes, but when the environmentalists got informed about uranium mine, they warned about newly born two-headed cows.

Reference 2 - 1,51% Coverage

I think that it was related to use of volcanic metals, he added that everyone understood that mining was caused some health issues, especially, due to the mining explosion; the dust sit on the fruits.

Reference 3 - 3,41% Coverage

According to RA Mining Code, large mining companies had to make some contributions from their profits to affected communities. Didn't remember the percentage or proportion contributions from the profits but he was sure that it was stipulated by law that any mining company had to make certain contributions to communities and for large mining organizations the exact amount of contributions was stipulated by law, in order for them not to make very small contributions

Reference 4 - 0,83% Coverage

I characterized the changes to the local community's economic situation as a consequence of the project as positive 2

Reference 5 - 2,62% Coverage

1000 AMD annual support to affected community, the owner of that mining company used to say that this miserable amount of contribution was also investment, although that mining company wasn't large, anyway 1000 AMD annually support was ridiculous amount of money, therefore, Mr. Vardanyan stressed the existence of socially responsible companies and so-called "companies".

Reference 6 - 3,45% Coverage

Given my current job responsibilities, he was frequently visiting villages and they witnessed that someone was able to ensure a normal standard of living, bought car, renovated his/her house, conversely, other villager's house was destroyed, because he was alcoholic and always joined other alcoholics and looked for something to drink, therefore, regardless of our good will, these groups of people couldn't become economically equal, because no any employer hired alcoholics.

Reference 7 - 0,59% Coverage

The purchasing power of nearby communities had increased after the project started.

Reference 8 - 2,56% Coverage

Mr. Vardanyan couldn't say whether businesses benefited from the project or not, but most probably yes, e.g. the mining companies shouldn't buy locally produced agricultural products, i.e. potatoes, tomatoes, cucumbers, meat from Yerevan, instead they would buy it from local businesses, therefore, somehow local businesses benefited from the exploitation of mine.

§ 2 references coded [2,61% Coverage]

Reference 1 - 1,48% Coverage

But on the other side we have big communities where there are educated people where there are environmental NGOs and they started to protest against investments in mining.

Reference 2 - 1,13% Coverage

Because there you will find people who are against but local communities think in general that these investments are a good thing.

7.4 List of interview respondents

Number	Date	Where	Interviewed	Collected	Approach to interview	Group
1	13/03/14	Skype	Anna Shahnazaryan	Recorded	Exploratory	Civil society
2	26/04/14	Yerevan	Anna Shahnazaryan	Recorded	Exploratory	Civil society
3	28/04/14	American University Armenia	Artak	Notes	Exploratory	Civil society
4	28/04/14	Ministry of Energy and Natural Resources	Tigran Melkonyan/Victoria Keshihyan	Notes	Exploratory	Government
5	28/04/14	Ministry of Energy and Natural Resources	Daniel Stepanyan/ Head of Renewable Energy	Notes	Exploratory	Government
6	30/04/14	Ministry of Economy	Vagan Lalayan	Notes	Exploratory	Government
7	29/04/14	Labour Union	Representative form the labour union	Notes	Exploratory	Civil society
8	29/04/14	R2R	Tamara	Notes	Exploratory	Civil society
9	29/04/14	Ministry of Mining	Vardan Vardayan	Notes	Exploratory	Government
10	01/05/14	Shnogh	Group (three males, one female)	Recorded	Exploratory	Local Community
11	01/05/14	Teghut	Group (five females)	Recorded	Exploratory	Local Community
12	05/04/14	Skype	Alen Amerikanyan	Recorded	Exploratory	Expert
13	11/09/14	Cascade	Alen Amerikanyan	Notes	Exploratory	Expert

Number	Date	Where	Interviewed	Collected	Approach to interview	Group
14	12/09/14	Vallex	Gagik	Notes	Exploratory	MNE
15	12/09/14	Yerevan	Save Teghut Initiative	Notes	Exploratory	Civil society
16	15/09/14	Arevik	Hayk Gabrielyan	Notes	Interview guide	Expert
17	01/05/14	EKF	Claus Prindal Sørensen	Notes	Exploratory	Expert
18	15/09/14	SolVar	Ruben Vardanyan	Notes	Interview guide	Expert
19	15/09/14	Solart	Artin Melikyan	Notes	Interview guide	Expert
20	15/09/14	TechnoEco	Mikhyail Martirosyan	Notes	Interview guide	Expert
21	16/09/14	Contact-A	Victor Afyan	Notes	Interview guide	Expert
22	16/09/14	Arpi Solar	Arayik Chobanyan	Notes	Interview guide	Expert
23	16/09/14	H2ECONomy	Agassy Manoukian	Notes	Interview guide	Expert
24	16/09/14	Ecolur	Inga Zarafyan	Mail	Interview guide	Civil society
25	17/09/14	San Alfredo	Karen Arabyan	Notes	Interview guide	Expert
26	05/05/15	American University Armenia	Artak Hambaryan	Notes	Interview guide	Expert
27	05/05/15	American University	Alen Amerikanyan	Notes	Interview guide	Civil society



Number	Date	Where	Interviewed	Collected	Approach to interview	Group
		Armenia				
28	06/05/15	Ararat	Village head plus two men (pensioners) and one woman (clerk)	Recorded	Interview guide	Local Community
29	06/05/15	Saravan	Village head	Recorded	Interview guide	Local Community
30	06/05/15	Gndevaz	Village head	Recorded	Interview guide	Local Community
31	07/05/15	Yerevan	Save Teghut Initiative	Notes	Interview guide	Civil society
32	07/05/15	Yerevan	Narine Tadevosyan (World Bank)	Recorded	Interview guide	Civil society
33	08/05/15	Vallex	Gagik	Recorded	Interview guide	MNE
34	08/05/16	Teghut	Village head and three women residents (2 working in the village administration, one stay-at-home wife)	Recorded	Interview guide	Local Community
35	08/05/16	Shnogh	Village head	Recorded	Interview guide	Local Community
36	08/05/15	Ministry of Energy and Natural Resources	Vagan Vardanyan	Recorded	Interview guide	Government
37	10/05/15	Kapan	ZCMC	Notes	Interview	MNE


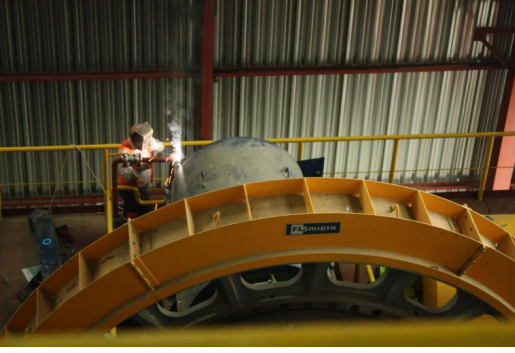

Number	Date	Where	Interviewed	Collected	Approach to interview	Group
					guide	
38	11/05/15	Kapan	Three residents (two men, skilled worker and pensioner, and one woman, stay-at-home wife)	Notes	Interview guide	Local Community
39	11/05/15	Karajan	Village head	Recorded	Interview guide	Local Community
40	13/05/15	Yerevan	Nara Arzumanyan (Lydian International)	Recorded	Interview guide	MNE
41	10/05/16	Yerevan	Alan Americanyan (AUA)	Notes	Interview guide	Expert
42	11/05/16	Yerevan	Narine tadevosyan (World Bank)	Notes	Interview guide	Expert
43	11/05/16	Yerevan	Daniel Petrosyan (ANAU)	Notes	Interview guide	Expert
44	13/05/16	Yerevan	Samvel Avetisyan (Head of Amberd scientific department of ASUE)	Notes	Interview guide	Expert
45	16/05/16	Yerevan	Ashot Sargsyan (political advisor)	Notes	Interview guide	Government
46	16/05/16	Stepanakert	Researcher NK	Notes	Interview guide	Expert
47	17/05/16	Agarak	Manager GeoProMining	Notes	Interview guide	MNE
48	18/05/16	Yerevan	Save Teghut	Notes	Interview	Civil society




Number	Date	Where	Interviewed	Collected	Approach to interview	Group
			Initiative		guide	
49	18/05/16	Yerevan	Inga Zarfyan (Ecolur)	Recorded	Interview guide	Civil society
50	18/05/16	Yerevan	Levon Galstyan (Pan-Armenian environmental front)	Recorded	Interview guide	Civil society



7.5 Examples of observations findings



This appendix describes some of the findings derived from observations and documented by photos. These serve as examples of how photos were used as documentation and verify claims made in interviews with mining MNE managers, CofPs and CofIs.



No.	Date	Description	Photo
1	02/05 /2014	Teghut village: Mine site from the village. Note the small stream which is the Teghut water supply.	
2	18/05 /2015	Karajan: Mine site and in the background the town itself. From the edge of the mine to the town is approximately 50 metres.	




No.	Date	Description	Photo
3	29/09 /2015	Kapan: Tailings dam in front town in the background.	
4	14/09 /2014	Teghut mine: Processing equipment being installed. Notice the FLSmidth logo on the crusher drum.	
5	06/05 /2015	Ararat: GeoProMining sponsored World War Two memorial.	


No.	Date	Description	Photo
6	20/05 /2015	Gndevaz: Village heads building. Renovated by Lydian International.	
7	02/05 /2014	Teghut village: Dirt road.	
8	19/09 /2014	Teghut: Cultural heritage site (Winery) protection at the Vallex mine.	

No.	Date	Description	Photo
9	04/10 /2014	Aleverdi: Vallex mining copper smelter. Notice the extended chimney leading up to the top of the ridge.	
10	13/05 /2015	Teghut village: Paved road sponsored by Vallex mining. See photo 7 for the same road one year before.	

No.	Date	Description	Photo
11	13/05 /2015	Teghut village: Culture house sponsored by Vallex mining.	
12	14/05 /2015	Shnogh: Church sponsored by Vallex Group.	

No.	Date	Description	Photo
13	14/05 /2015	Vallex Mining: Tailings dam. See photos 1 and 15 for before and after impact on CofP.	
14	15/05 /2015	Cronimet: Mine as seen from the town of Karajan.	

No.	Date	Description	Photo
15	16/05 /2015	Dundee Precious Metals: Tailings dam, Artsvanik.	
16	22/05 /2016	Teghut: Alleged tailings dam leak from Teghut mine (grey mud). Photo taken by Armenian Environmental NGO).	
17	25/04 /2014	UWC Dilijan College (Under construction)	

No.	Date	Description	Photo
18	11/04 /2014	YSCI school Yerevan (Printer funded by USAid)	

7.6 Villages and towns

Community	Region	Population	Founded
Shnogh	Lori	2,893	Tenth century
Teghut	Lori	746	Twentieth century
Ararat	Ararat	7,609	1930
Saravan	Vayots Dzor	340	Seventeenth century
Kapan	Syunik	43,190	Tenth century
Karajan	Syunik	7,163	1958
Agarak	Syunik	4,429	1949
Gndevaz	Vayots Dzor	983	Tenth century

Source: Armenian Statistical Office Population Census Data 2011

7.7 The Multinationals

The nine mining MNEs are engaged in either Greenfield projects, new mining sites, or the exploration phase and brownfield projects, which are mining sites, bought from already existing mining companies or reopened old sites. Some of the biggest sites in the country (and in the Caucasus as a whole) have been active since before the fall of the Soviet Union. The MNEs all operate through wholly owned or majority owned subsidiaries, depending on the time of operation and history of their entry mode. The following section describes the major mining MNEs and their current activities. The information was collected using available public sources such as corporate web sites, annual reports, CSR reporting (if available) and a company by company search in Orbis (Orbis, 2016). Detailed information was not always available at the subsidiary level, and some data points were determined based on reporting from the home country headquarters. (An overview of mining MNEs is found in Table 13 and the process of collecting archival data is further explained in the methods section 1.4.1.1).

Cronimet is a German-based limited liability multinational that has moved from involvement in scrap metal in its country of origin to mining. The company has activities in both Armenia, through the Zangezur Copper Molybdenum Combine (ZCMC), and South Africa, where it mines platinum and chrome ore. Cronimet has owned a majority stake in ZCMC since 2004, and deposits at the Karajan mine in southern Armenia. The mine is situated inside Karajan, a city of some 7,200 residents, and is the single biggest employer in the city. The mining site contains a total of 2.24 billion ton of copper/molybdenum ore, which constitutes around six per cent of the world's molybdenum reserves. The copper- and molybdenum-bearing ore is extracted from an open pit mine which is the biggest mine in the country. The copper concentrate is sold directly to the world market, and Armenian partner companies' further process the molybdenum into molybdenum derivatives. A significant achievement, according to Cronimet, is the launch of what the company calls the eco-friendly mining of raw materials, focusing on the use of renewable energy sources like solar panels and the environmental use of water at its mining site. The company is also engaged in several social projects in the local city of Karajan, setting up a charity that invests in projects involving primary school education and sports events. The company has adopted a system where it engages with communities through a charity foundation supporting children needs, education at both primary and higher levels, innovation by youth as well as of support of health care services. Cronimets social responsibility program aimed at communities is describe as “We properly identify and mitigate risks to people and environment associated with our operations.”

GeoProMining (GPM) is a Russian limited liability multinational that has activities at several mining sites in Armenia and Russia. GPM operates through two subsidiaries. GPM Gold conducts operations at two locations, the Zod mine in Eastern Armenia and the Agarak gold extraction plant located just south of Yerevan. The gold production is from an old brownfield mine dating back to the Soviet period that did not restart operations until 2008, when GPM took over and was able to make the mine profitable. One of the largest deposits of gold in the Caucasus region is located at the Zod mine site in eastern Armenia. The deposit is transported from Zod by rail to the Ararat processing plant, where the ore is processed and smelted into doré bars, which are a semi-pure product with a mix of silver and gold that is better suited for transportation. GPM also operates through a mining subsidiary, the Agarak Copper-Molybdenum Mine Complex, in the southern part of the country. This site produces copper and molybdenum at a capacity of around 3.5 million ton of ore per year, near the town of Agarak. GPM is also conducting exploration activities for copper-molybdenum at two additional sites at Gladszor and Hankavan. It has implemented a companywide programme for social responsibility called 'Resources for Good', including, for example, fire safety at production sites and health and safety in the workplace, along with the effects that mining has on local communities. The community elements of the programme include various activities such as the development of the energy and water infrastructure, sponsorship for sporting events, and repairs to hospitals, schools and kindergartens, in addition to scholarships for universities in Armenia and Russia. Like Cronimet is GPM also administering a charity fund called the Social Initiatives Fund which sponsors projects such as the construction of a new church, a memorial and a playground in both Ararat and Agarak.

Vallex Mining is a subsidiary of Teghut Investments Limited, based in Cyprus and owned by Valery Mejlumyan, who is the director and majority stockholder of the consortium Vallex Group. The Vallex Group has activities in both Armenia and the Republic of Nagorno Karabakh, where it operates under the subsidiary Base Metals. Vallex Mining has operated a Greenfield copper-molybdenum mine near the village of Teghut in North Eastern Armenia since 2014. The mine is estimated to produce some 64,000 tonnes of copper concentrate each year, making the site the second biggest mining site in the country after the pit in Karajan. The company has been under fierce scrutiny from NGOs and the media because the mine location is in an environmentally sensitive region. The Cyprus connection is also interesting, as it is believed be used as an instrument to avoid paying tax in Armenia, and for its ability to attract investments from a Danish institutional investor (PensionDanmark, 2013). The company has

implemented several reporting standards, such as ISO 14000 for environmental reporting, as well as the IFC performance standard for ecological and social sustainability, a social responsibility standard that is issued by the World Bank (IFC, 2012; ISO, 2009). The social responsibility programme focused on communities has included stakeholder engagement programmes with town hall meetings, environmental reporting and impact studies, and plans for reporting on the main developments in relation to the mine project. Some of the programmes have also resulted in investments in local community development such as the renovation of schools, building a community house and projects related to restoring trees that were cut down during the construction of the mine.

Lydian International is a Canadian public limited liability mining company which is exploring Greenfield opportunities to extract gold in the region of Amulsar in southern Armenia through the subsidiary Geoteam CJSC. The project has the backing of two strategic investors, the World Bank IFC and the European Bank for Reconstruction and Development (EBRD), who together have invested a total of 13.2 million USD out of a total of 30 million USD invested in the project (EBRD, 2016). The gold mine is yet to go into production, which is planned for 2017. According to Lydian International, the project is going to have tangible impacts both directly and indirectly on the Armenian economy, and more than 426 million USD of capital investment for the Amulsar gold project is planned during the first two years. It is expected that the project will generate revenues that will contribute approximately one per cent to the Armenian GDP over its 11 year predicted lifespan. The size of the mine will put the Amulsar gold project within the top five Armenian taxpayers and will provide up to 1,300 jobs for local Armenians in the region, according to the company (Lydian International, 2016). Geoteam presents one of the most ambitious plans for community engagement of all the multinationals found in the country. According to Geoteam's long-term financial plan, the company will undertake investments of between 400,000 USD and 700,000 USD each year in local communities each year the project operates. Investments of this size will significantly impact social and cultural structures in the three villages surrounding the site, Vayots Dzor, Seravan and Gndevaz. During the exploration phases, the company made local investments in infrastructure like roads, electricity and gas. They have also made cheap loans available for local farmers, which have enabled them to modernise their production and be contracted to deliver agricultural products to the mine, once operational. Geoteam uses the IFC performance standard on environmental and social sustainability to report its social responsibility activities.

Dundee Precious Metals is a Canadian-based public limited liability company that specialises in copper and gold mining. The company has operations in Bulgaria, Namibia and Armenia, where it operates through the wholly owned subsidiary Deno Gold, which later became Dundee Precious Metals Kapan CJSC. The company has an operation in Kapan, a brownfield mine located in the southern part of the country, acquired in 2006, which produces copper and zinc concentrate as well as gold and silver. The mine produced some 1,570 kg of gold and 500,000 kg of copper in 2015. Some 4,000 employees are employed by Dundee Precious Metals in total, of which approximately 1,221 work at the site in Kapan. The company uses the Global Reporting Initiative (GRI) standard, including the mining and metals supplements, to organise its reporting on community engagement activities, and has declared that it is ready to comply with the EITI standard requirements (EITI, 2015; GRI, 2006). According to its report, many of the challenges are related to environmental and social issues, worker attitudes towards safety, and traditions from the Soviet Union period which continues to have an impact today. Activities directed towards local communities has included education, health, cultural heritage sports, development of small and medium size enterprises as well as constructing infrastructure. At the start of 2016, the operation in Kapan was sold to Polymetal, a Russian MNE, which took over operations in the middle of the year. Polymetal is listed on the London Stock Exchange and has specialised in precious metal mining in Russia, Kazakhstan and now Armenia.

Fortune Oil is a Chinese incorporated MNE owned by the Chinese state investing in and conducting operations connected to oil and gas supply and to large-scale infrastructure projects. The company is headquartered in Hong Kong and is a private limited company owned by Fortune Dynasty Holdings Limited. Its activities in Armenia are focused on iron mining through the subsidiary Bounty Resources Armenia, located in the central part of Armenia. The company has yet to start production (Greenfield) and has encountered severe difficulties, as commodity prices have fallen and operating in Armenia has proved harder than expected. The company has endured a loss of some GBP 41 million pounds and is waiting to see if a business case can be made which will make the project economically sustainable (Fortune Oil, 2016). It is estimated that the company will be able to produce some two million ton of iron ore when it is operational; however, problems related to the Armenian-Georgian railway, which is supposed to be the main channel for export of ore concentrate, are making the project uneconomical. Alternatives are being considered in neighbouring countries that may be able to process the ore concentrate; however, it is unclear where such operations could take place, as the only real alternative is the

open border with Iran. The company have no current activities directed at communities in the country and have not communicated that they adhere to any specific standard.

Orogen Gold is a British and Irish publicly traded gold mining company operating in Mutsk, just south of the Lydian International project in Amulsar. The ore that the company is mining is in fact the same strain as that which Lydian is exploring, with roughly the same yield. Orogen Gold signed a memorandum of understanding with Georaid CJSC, an Armenian registered company, covering the Mutsk gold project in southern Armenia in January 2013, and this agreement was superseded by a joint venture agreement, which was signed in February 2014. Orogen also operates a gold mine at Silverston, Nevada, in the United States. In terms of community engagement, the company does not have a clear standardised approach. It does not subscribe to any of the international standards but focuses on applying local and international legislation in relation to environmental health and safety, as well as meeting demands from stakeholders to monitor and, if applicable, remedy issues that might arise from the impact of mining operations. The project in Mutsk is still in the exploration phase and the company is currently raising funds to proceed.

Global Gold is a public limited liability company from the United States and has been operating in Armenia since 1995 through the subsidiary Mego Gold Inc. The company has several projects at different stages in Armenia and the sites that have been most developed are Toukhmanuk, Marjan and Getik. The Toukhmanuk site is located in north central Armenia and is Global Gold's most significant gold and silver project in Armenia. Global Gold acquired the property in two stages in 2005 and 2006. The Armenian government approved new classifications of gold and silver and, in 2014 a new processing plant was delivered to increase production. The entire Toukhmanuk licensed area is 53.76 square kilometres, which makes it one of the biggest gold mining sites in the country. The Marjan site is located in north central Armenia, where the company has been engaged in a major exploration and drill programme. Exploration conducted in 2006 confirmed a significant gold and silver deposit. The site is currently at an advanced stage of exploration, and the company was granted a 25-year exclusive mining licence in 2008. The Getik site is a promising gold exploration property and was acquired in 2006 and 2007. The exploration permit area is approximately 27 square kilometres, and the property is located in north-eastern Armenia in the Geghargunik region. The property was explored for gold and uranium by the Soviets, and the results of their work indicate the presence of uranium oxide in one portion and gold (2.5 million ton of ore estimated at 4.5 g/t) in another. Exploration and drill results from 2006 confirm gold potential in one zone and gold and

silver potential in another. There have been several complaints from communities and NGOs about the development and expansion of the Toukhanuk site, and the company has responded by putting a stakeholder engagement meeting system in place; however, the company does not follow any of the international standards and relies on a more reactive approach to the social and environmental impacts that mining might cause. The company says that the “the Company recognises its social responsibilities and seeks to adopt the best contemporary practice applicable to each country and region of operation” (Global Gold, 2016). When it comes to the stance towards communities the company has adopted an ethical code of conduct where it pledges to disclose information on its governance, environment and social impact as well as implement grievance mechanisms where both stakeholders and employees are protected.

There are a few other MNEs operating in the country which have either smaller operations in the exploration phases or are raising funds to start projects, or who are looking at acquiring already existing sites. During this study, several of the sites included have changed hands, either through acquisition of older companies operating in the country or by MNEs trying to enter the country. One of these is Centerra Gold, a major Canadian MNE that is exploring opportunities in the country. The company is unique in the way that it engages explicitly in corporate responsibility activities on environmental issues. Cyanide pollution, which is a major problem in many gold sites, has been a particular area of focus; the company also highlights its commitment to the EITI (2015), and was one of the first companies to sign up to this World Bank initiative. Another company is Irish Unity Gold and Anglo African Minerals Plc, which operated through the subsidiary Azatek Gold Ltd; however, the company was unable to raise funds for the continuation of its project and had to terminate its operation in 2016. The Russian company is a major mining company in Russia and Central Asia, with sites exploring gold and silver deposits. Polymetal engagement in corporate responsibility is quite developed in terms of engagement with international standards such as the ISO 14001 for environmental management and inclusion in the FTSE4 Good Index for Emerging Markets.

The following table provides a summary (replicated in chapter 4 with a smaller extract of MNEs) of the individual mining MNEs included in the study and provides basic information about their home country, their location in Armenia, the scale and location of their operation, their systems of governance and company-specific information. The first column shows the name of the MNE, as based in the home country. If the Armenian subsidiary company was either bought or sold, the acquiring company and year are stated in parentheses. The second column shows the MNE home country, followed by the type of activity, which states the type of

metal ore that is being mined. All the mines are open pit mines, using excavation, where the ore is relatively close to the surface (starting at approximately 20 to 50 metres), so this is not specified. The next column shows the mining stage of operations: ‘exploration’ indicates a mine is being planned and the infrastructure needed is being built; ‘production’ is when the mine is in operation and ore is being produced. The place of operation is the village(s) or town that is nearest the mine, and/or where the ore is being processed. The subsidiary is the name of the legal entity that the MNE is operating under in Armenia, and home country is determined by the MNE as having at least a 51 per cent share in the subsidiary or by being the main partner in a consortium. The column indicating years of mining operations shows the approximate number of years the mine has been in the exploration and producing phases in total, in some cases under different ownership. Number of sites indicates how many sites the MNE is active in: in some cases, one site can affect several local communities, while in others there are several mines near the same community. The final two columns indicate whether the MNE and subsidiaries are involved in CSR and what type of international normative standard they are following, if any. If the MNE follows the Global Compact, this is indicated as UN; in cases where the company has deployed the International Finance Corporation, the designation IFC is used (IFC, 2012); if it participates in the Extractive Industry Transparency Initiative (EITI) (EITI, 2015), this is indicated as World Bank. These standards are in some cases used in combination with one or more of the standards developed by the International Standards Organisation (ISO), such as ISO 26000 (social responsibility), or ISO 14000 (environmental management) (ISO 14000, 2009; ISO 26000, 2012). Other approaches to CSR include self-developed standards and health and safety guidelines, which are internally developed. None of the MNEs adopts systems which target local communities as a unique source of risk as an approach to risk management; however, references were found to their social impact or community engagement activities in CSR programmes or the equivalent, which suggests recognition that mining does result in changes to communities, and that at least some of the MNEs believe that this impact could be negative.

Table 13: Mining MNEs in Armenia

MNE	Ownership structure	Home Country	Type of Activity	Stage of Mining Operations	Approx. Number of Employees	Place of Operation	Subsidiary	Years of Mining Operations	Number of Sites	CSR Activities	Type of CSR Standard

MINE	Ownership Structure	Home Country	Type of Activity	Stage of Mining Operations	Approx. Number of Employees	Place of Operation	Subsidiary	Years of Mining Operations	Number of Sites	CSR Activities	Type of CSR Standard
Cronimet	Limited Liability Company	Germany	Copper/molybdenum	Production	1000+	Karajan	Zangezur copper-molybdenum complex (ZCMC)	50+	1	Yes	Self-developed non-standardised approach
GeoPro Mining	Limited Liability Company	Russia	Copper/molybdenum	Production	1000+	Agarak, Zod (Ararat) and Megradzor	Agarak Copper-Molybdenum Mine Complex	25+	1	Yes	OHS AS 18001 and self-developed, health and safety
Vallex Group	Limited Liability Company	Cyprus	Copper/molybdenum	Production	1000+	Teghut and Shnogh	Teghut CJSC	2	1	Yes	World Bank (IFC - Performance Standards on Environmental and Social Sustainability)
Lydian International	Public Limited Company	Canada	Gold	Exploration	>25	Vayots Dzor, Seravan and Gndevaz	ZAO Geoteam of Armenia	6	1	Yes	World Bank (IFC - Performance Standards on Environmental and Social Sustainability)
Dundee Precious Metals (acquired by Polymetal, 2016)	Public Limited Company	Canada	Gold, Copper, Silver, Zinc	Production	1000+	Kapan	Deno Gold	+10	1	Yes	UN (Global Compact)
Fortune Oil Co	Incorporated Business	China	Iron	Exploration	>25	Hrazdan	Bounty Resources Armenia	3	1	No	None
Orogen Gold	Public Company	United Kingdom	Gold	Exploration	>25	Mutsk	None	3	1	No	None
Global Gold Corporation (in co-operation with Caldera Resources Inc.)	Public Limited Company	United States	Gold	Production	1000+	Marjan, Toukhtmanuk, Getik	Marjan Mining Corporation	10+	3	Yes (Code of Ethics)	None
Unity Gold (acquired by Anglo-African Minerals, 2010/ 2015)	Incorporated Business	Ireland	Gold	Exploration	>25	Vayk	Azatek Gold Ltd.	>25	1	No	None

MNE	Ownership structure	Home Country	Type of Activity	Stage of Mining Operations	Approx. Number of Employees	Place of Operation	Subsidiary	Years of Mining Operations	Number of Sites	CSR Activities	Type of CSR Standard
Centerra Gold (Start 2016)	Public Limited Company	Canada	Gold	Exploration	>25	Atevan Homik	None	0	1	Yes	EITI ready (Extractive Industries Transparency Initiative) GRI (Global Reporting Initiative)
Polymetal	Public Limited Company	Russia	Gold, Copper, Silver, Zinc	Production	1000+	Kapan	None	+10	1	Yes	UN (Global Compact)

TITLER I PH.D.SERIEN:

– a Field Study of the Rise and Fall of a Bottom-Up Process

2004

1. Martin Grieger
Internet-based Electronic Marketplaces and Supply Chain Management
2. Thomas Basbøll
*LIKENESS
A Philosophical Investigation*
3. Morten Knudsen
*Beslutningens vaklen
En systemteoretisk analyse af moderniseringen af et amtskommunalt sundhedsvæsen 1980-2000*
4. Lars Bo Jeppesen
*Organizing Consumer Innovation
A product development strategy that is based on online communities and allows some firms to benefit from a distributed process of innovation by consumers*
5. Barbara Dragsted
*SEGMENTATION IN TRANSLATION AND TRANSLATION MEMORY SYSTEMS
An empirical investigation of cognitive segmentation and effects of integrating a TM system into the translation process*
6. Jeanet Hardis
*Sociale partnerskaber
Et socialkonstruktivistisk casestudie af partnerskabsaktørers virkelighedsopfattelse mellem identitet og legitimitet*
7. Henriette Hallberg Thygesen
System Dynamics in Action
8. Carsten Mejer Plath
Strategisk Økonomistyring
9. Annemette Kjærgaard
Knowledge Management as Internal Corporate Venturing
10. Knut Arne Hovdal
*De professionelle i endring
Norsk ph.d., ej til salg gennem Samfundslitteratur*
11. Søren Jeppesen
*Environmental Practices and Greening Strategies in Small Manufacturing Enterprises in South Africa
– A Critical Realist Approach*
12. Lars Frode Frederiksen
*Industriel forskningsledelse
– på sporet af mønstre og samarbejde i danske forskningsintensive virksomheder*
13. Martin Jes Iversen
*The Governance of GN Great Nordic
– in an age of strategic and structural transitions 1939-1988*
14. Lars Pynt Andersen
*The Rhetorical Strategies of Danish TV Advertising
A study of the first fifteen years with special emphasis on genre and irony*
15. Jakob Rasmussen
Business Perspectives on E-learning
16. Sof Thrane
*The Social and Economic Dynamics of Networks
– a Weberian Analysis of Three Formalised Horizontal Networks*
17. Lene Nielsen
Engaging Personas and Narrative Scenarios – a study on how a user-centered approach influenced the perception of the design process in the e-business group at AstraZeneca
18. S.J Valstad
*Organisationsidentitet
Norsk ph.d., ej til salg gennem Samfundslitteratur*

19. Thomas Lyse Hansen
Six Essays on Pricing and Weather risk in Energy Markets
20. Sabine Madsen
Emerging Methods – An Interpretive Study of ISD Methods in Practice
21. Evis Sinani
The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation
22. Bent Meier Sørensen
Making Events Work Or, How to Multiply Your Crisis
23. Pernille Schnoor
*Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv*
24. Sidsel Fabech
*Von welchem Österreich ist hier die Rede?
Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser*
25. Klavs Odgaard Christensen
*Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada*
26. Dana B. Minbaeva
Human Resource Practices and Knowledge Transfer in Multinational Corporations
27. Holger Højlund
*Markedets politiske fornuft
Et studie af velfærdens organisering i perioden 1990-2003*
28. Christine Mølgaard Frandsen
*A.s erfaring
Om mellemværendets praktik i en transformation af mennesket og subjektiviteten*
29. Sine Nørholm Just
The Constitution of Meaning – A Meaningful Constitution? Legitimacy, identity, and public opinion in the debate on the future of Europe
- 2005**
1. Claus J. Varnes
Managing product innovation through rules – The role of formal and structured methods in product development
2. Helle Hedegaard Hein
Mellem konflikt og konsensus – Dialogudvikling på hospitalsklinikker
3. Axel Rosenø
Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development
4. Søren Buhl Pedersen
*Making space
An outline of place branding*
5. Camilla Funck Ellehave
*Differences that Matter
An analysis of practices of gender and organizing in contemporary work-places*
6. Rigmor Madeleine Lond
Styring af kommunale forvaltninger
7. Mette Aagaard Andreassen
Supply Chain versus Supply Chain Benchmarking as a Means to Managing Supply Chains
8. Caroline Aggestam-Pontoppidan
*From an idea to a standard
The UN and the global governance of accountants' competence*
9. Norsk ph.d.
10. Vivienne Heng Ker-ni
An Experimental Field Study on the

- Effectiveness of Grocer Media Advertising*
Measuring Ad Recall and Recognition, Purchase Intentions and Short-Term Sales
11. Allan Mortensen
Essays on the Pricing of Corporate Bonds and Credit Derivatives
12. Remo Stefano Chiari
Figure che fanno conoscere
Itinerario sull'idea del valore cognitivo e espressivo della metafora e di altri tropi da Aristotele e da Vico fino al cognitivismo contemporaneo
13. Anders McIlquham-Schmidt
Strategic Planning and Corporate Performance
An integrative research review and a meta-analysis of the strategic planning and corporate performance literature from 1956 to 2003
14. Jens Geersbro
The TDF – PMI Case
Making Sense of the Dynamics of Business Relationships and Networks
15. Mette Andersen
Corporate Social Responsibility in Global Supply Chains
Understanding the uniqueness of firm behaviour
16. Eva Boxenbaum
Institutional Genesis: Micro – Dynamic Foundations of Institutional Change
17. Peter Lund-Thomsen
Capacity Development, Environmental Justice NGOs, and Governance: The Case of South Africa
18. Signe Jarlov
Konstruktioner af offentlig ledelse
19. Lars Stæhr Jensen
Vocabulary Knowledge and Listening Comprehension in English as a Foreign Language
- An empirical study employing data elicited from Danish EFL learners*
20. Christian Nielsen
Essays on Business Reporting
Production and consumption of strategic information in the market for information
21. Marianne Thejls Fischer
Egos and Ethics of Management Consultants
22. Annie Bekke Kjær
Performance management i Process-innovation
– belyst i et social-konstruktivistisk perspektiv
23. Suzanne Dee Pedersen
GENTAGELSENS METAMORFOSE
Om organisering af den kreative gørem i den kunstneriske arbejdspraksis
24. Benedikte Dorte Rosenbrink
Revenue Management
Økonomiske, konkurrencemæssige & organisatoriske konsekvenser
25. Thomas Riise Johansen
Written Accounts and Verbal Accounts
The Danish Case of Accounting and Accountability to Employees
26. Ann Fogelgren-Pedersen
The Mobile Internet: Pioneering Users' Adoption Decisions
27. Birgitte Rasmussen
Ledelse i fællesskab – de tillidsvalgte fornyende rolle
28. Gitte Thit Nielsen
Remerger
– skabende ledelseskrafter i fusion og opkøb
29. Carmine Gioia
A MICROECONOMETRIC ANALYSIS OF MERGERS AND ACQUISITIONS

30. Ole Hinz
Den effektive forandringsleder: pilot, pædagog eller politiker?
Et studie i arbejdslederens meningstilskrivninger i forbindelse med vellykket gennemførelse af ledelsesinitierede forandringsprojekter
31. Kjell-Åge Gotvassli
Et praksisbasert perspektiv på dynamiske læringsnetværk i toppidretten
Norsk ph.d., ej til salg gennem Samfundslitteratur
32. Henriette Langstrup Nielsen
Linking Healthcare
An inquiry into the changing performances of web-based technology for asthma monitoring
33. Karin Tweddell Levinsen
Virtuel Uddannelsespraksis
Master i IKT og Læring – et casestudie i hvordan proaktiv proceshåndtering kan forbedre praksis i virtuelle læringsmiljøer
34. Anika Liversage
Finding a Path
Labour Market Life Stories of Immigrant Professionals
35. Kasper Elmquist Jørgensen
Studier i samspillet mellem stat og erhvervsliv i Danmark under 1. verdenskrig
36. Finn Janning
A DIFFERENT STORY
Seduction, Conquest and Discovery
37. Patricia Ann Plackett
Strategic Management of the Radical Innovation Process
Leveraging Social Capital for Market Uncertainty Management
2. Niels Rom-Poulsen
Essays in Computational Finance
3. Tina Brandt Husman
Organisational Capabilities, Competitive Advantage & Project-Based Organisations
The Case of Advertising and Creative Good Production
4. Mette Rosenkrands Johansen
Practice at the top
– how top managers mobilise and use non-financial performance measures
5. Eva Parum
Corporate governance som strategisk kommunikations- og ledelsesværktøj
6. Susan Aagaard Petersen
Culture's Influence on Performance Management: The Case of a Danish Company in China
7. Thomas Nicolai Pedersen
The Discursive Constitution of Organizational Governance – Between unity and differentiation
The Case of the governance of environmental risks by World Bank environmental staff
8. Cynthia Selin
Volatile Visions: Transactions in Anticipatory Knowledge
9. Jesper Banghøj
Financial Accounting Information and Compensation in Danish Companies
10. Mikkel Lucas Overby
Strategic Alliances in Emerging High-Tech Markets: What's the Difference and does it Matter?
11. Tine Aage
External Information Acquisition of Industrial Districts and the Impact of Different Knowledge Creation Dimensions

2006

1. Christian Vintergaard
Early Phases of Corporate Venturing

- A case study of the Fashion and Design Branch of the Industrial District of Montebelluna, NE Italy*
12. Mikkel Flyverbom
*Making the Global Information Society Governable
On the Governmentality of Multi-Stakeholder Networks*
 13. Anette Grønning
*Personen bag
Tilstedevær i e-mail som interaktionsform mellem kunde og medarbejder i dansk forsikringskontekst*
 14. Jørn Helder
*One Company – One Language?
The NN-case*
 15. Lars Bjerregaard Mikkelsen
*Differing perceptions of customer value
Development and application of a tool for mapping perceptions of customer value at both ends of customer-supplier dyads in industrial markets*
 16. Lise Granerud
*Exploring Learning
Technological learning within small manufacturers in South Africa*
 17. Esben Rahbek Pedersen
*Between Hopes and Realities:
Reflections on the Promises and Practices of Corporate Social Responsibility (CSR)*
 18. Ramona Samson
*The Cultural Integration Model and European Transformation.
The Case of Romania*
- 2007**
1. Jakob Vestergaard
*Discipline in The Global Economy
Panopticism and the Post-Washington Consensus*
 2. Heidi Lund Hansen
*Spaces for learning and working
A qualitative study of change of work, management, vehicles of power and social practices in open offices*
 3. Sudhanshu Rai
*Exploring the internal dynamics of software development teams during user analysis
A tension enabled Institutionalization Model; "Where process becomes the objective"*
 4. Norsk ph.d.
Ej til salg gennem Samfundslitteratur
 5. Serden Ozcan
*EXPLORING HETEROGENEITY IN ORGANIZATIONAL ACTIONS AND OUTCOMES
A Behavioural Perspective*
 6. Kim Sundtoft Hald
*Inter-organizational Performance Measurement and Management in Action
– An Ethnography on the Construction of Management, Identity and Relationships*
 7. Tobias Lindeberg
*Evaluative Technologies
Quality and the Multiplicity of Performance*
 8. Merete Wedell-Wedellsborg
*Den globale soldat
Identitetsdannelse og identitetsledelse i multinationale militære organisationer*
 9. Lars Frederiksen
*Open Innovation Business Models
Innovation in firm-hosted online user communities and inter-firm project ventures in the music industry
– A collection of essays*
 10. Jonas Gabrielsen
Retorisk toposlære – fra statisk 'sted' til persuasiv aktivitet

11. Christian Moldt-Jørgensen
Fra meningsløs til meningsfuld evaluering.
Anvendelsen af studentertilfredsheds-målinger på de korte og mellemlange videregående uddannelser set fra et psykodynamisk systemperspektiv
12. Ping Gao
Extending the application of actor-network theory
Cases of innovation in the telecommunications industry
13. Peter Mejlby
Frihed og fængsel, en del af den samme drøm?
Et phronetisk baseret casestudie af frigørelsens og kontrollens sam-eksistens i værdibaseret ledelse!
14. Kristina Birch
Statistical Modelling in Marketing
15. Signe Poulsen
Sense and sensibility:
The language of emotional appeals in insurance marketing
16. Anders Bjerre Trolle
Essays on derivatives pricing and dynamic asset allocation
17. Peter Feldhütter
Empirical Studies of Bond and Credit Markets
18. Jens Henrik Eggert Christensen
Default and Recovery Risk Modeling and Estimation
19. Maria Theresa Larsen
Academic Enterprise: A New Mission for Universities or a Contradiction in Terms?
Four papers on the long-term implications of increasing industry involvement and commercialization in academia
20. Morten Wellendorf
Postimplementering af teknologi i den offentlige forvaltning
Analysen af en organisations kontinuerlige arbejde med informations-teknologi
21. Ekaterina Mhaanna
Concept Relations for Terminological Process Analysis
22. Stefan Ring Thorbjørnsen
Forsvaret i forandring
Et studie i officerers kapabiliteter under påvirkning af omverdenens forandringspres mod øget styring og læring
23. Christa Breum Amhøj
Det selvskabte medlemskab om managementsstaten, dens styringsteknologier og indbyggere
24. Karoline Bromose
Between Technological Turbulence and Operational Stability
– An empirical case study of corporate venturing in TDC
25. Susanne Justesen
Navigating the Paradoxes of Diversity in Innovation Practice
– A Longitudinal study of six very different innovation processes – in practice
26. Luise Noring Henler
Conceptualising successful supply chain partnerships
– Viewing supply chain partnerships from an organisational culture perspective
27. Mark Mau
Kampen om telefonen
Det danske telefonvæsen under den tyske besættelse 1940-45
28. Jakob Halskov
The semiautomatic expansion of existing terminological ontologies using knowledge patterns discovered

- on the WWW – an implementation and evaluation*
29. Gergana Koleva
European Policy Instruments Beyond Networks and Structure: The Innovative Medicines Initiative
 30. Christian Geisler Asmussen
Global Strategy and International Diversity: A Double-Edged Sword?
 31. Christina Holm-Petersen
*Stolthed og fordom
Kultur- og identitetsarbejde ved skabelsen af en ny sengeafdeling gennem fusion*
 32. Hans Peter Olsen
*Hybrid Governance of Standardized States
Causes and Contours of the Global Regulation of Government Auditing*
 33. Lars Bøge Sørensen
Risk Management in the Supply Chain
 34. Peter Aagaard
*Det unikkes dynamikker
De institutionelle mulighedsbetingelser bag den individuelle udforskning i professionelt og frivilligt arbejde*
 35. Yun Mi Antorini
*Brand Community Innovation
An Intrinsic Case Study of the Adult Fans of LEGO Community*
 36. Joachim Lynggaard Boll
*Labor Related Corporate Social Performance in Denmark
Organizational and Institutional Perspectives*
- 2008**
1. Frederik Christian Vinten
Essays on Private Equity
 2. Jesper Clement
Visual Influence of Packaging Design on In-Store Buying Decisions
 3. Marius Brostrøm Kousgaard
*Tid til kvalitetsmåling?
– Studier af indrulleringsprocesser i forbindelse med introduktionen af kliniske kvalitetsdatabaser i speciallægepraksissektoren*
 4. Irene Skovgaard Smith
*Management Consulting in Action
Value creation and ambiguity in client-consultant relations*
 5. Anders Rom
*Management accounting and integrated information systems
How to exploit the potential for management accounting of information technology*
 6. Marina Candi
Aesthetic Design as an Element of Service Innovation in New Technology-based Firms
 7. Morten Schnack
*Teknologi og tværfaglighed
– en analyse af diskussionen omkring indførelse af EPJ på en hospitalsafdeling*
 8. Helene Balslev Clausen
Juntos pero no revueltos – un estudio sobre emigrantes norteamericanos en un pueblo mexicano
 9. Lise Justesen
*Kunsten at skrive revisionsrapporter.
En beretning om forvaltningsrevisionsens beretninger*
 10. Michael E. Hansen
The politics of corporate responsibility: CSR and the governance of child labor and core labor rights in the 1990s
 11. Anne Roepstorff
Holdning for handling – en etnologisk undersøgelse af Virksomheders Sociale Ansvar/CSR

12. Claus Bajlum
Essays on Credit Risk and Credit Derivatives
13. Anders Bojesen
The Performative Power of Competence – an Inquiry into Subjectivity and Social Technologies at Work
14. Satu Reijonen
*Green and Fragile
A Study on Markets and the Natural Environment*
15. Ilduara Busta
*Corporate Governance in Banking
A European Study*
16. Kristian Anders Hvass
*A Boolean Analysis Predicting Industry Change: Innovation, Imitation & Business Models
The Winning Hybrid: A case study of isomorphism in the airline industry*
17. Trine Paludan
*De uvidende og de udviklingsparate
Identitet som mulighed og restriktion
blandt fabriksarbejdere på det aftayloriserede fabriksgulv*
18. Kristian Jakobsen
Foreign market entry in transition economies: Entry timing and mode choice
19. Jakob Elming
Syntactic reordering in statistical machine translation
20. Lars Brømsøe Termansen
*Regional Computable General Equilibrium Models for Denmark
Three papers laying the foundation for regional CGE models with agglomeration characteristics*
21. Mia Reinholt
The Motivational Foundations of Knowledge Sharing
22. Frederikke Krogh-Meibom
*The Co-Evolution of Institutions and Technology
– A Neo-Institutional Understanding of Change Processes within the Business Press – the Case Study of Financial Times*
23. Peter D. Ørberg Jensen
OFFSHORING OF ADVANCED AND HIGH-VALUE TECHNICAL SERVICES: ANTECEDENTS, PROCESS DYNAMICS AND FIRMLEVEL IMPACTS
24. Pham Thi Song Hanh
Functional Upgrading, Relational Capability and Export Performance of Vietnamese Wood Furniture Producers
25. Mads Vangkilde
*Why wait?
An Exploration of first-mover advantages among Danish e-grocers through a resource perspective*
26. Hubert Buch-Hansen
*Rethinking the History of European Level Merger Control
A Critical Political Economy Perspective*
- 2009**
1. Vivian Lindhardsen
From Independent Ratings to Communal Ratings: A Study of CWA Raters' Decision-Making Behaviours
2. Guðrið Weihe
Public-Private Partnerships: Meaning and Practice
3. Chris Nøkkentved
*Enabling Supply Networks with Collaborative Information Infrastructures
An Empirical Investigation of Business Model Innovation in Supplier Relationship Management*
4. Sara Louise Muhr
Wound, Interrupted – On the Vulnerability of Diversity Management

5. Christine Sestoft
Forbrugeradfærd i et Stats- og Livsformsteoretisk perspektiv
6. Michael Pedersen
Tune in, Breakdown, and Reboot: On the production of the stress-fit self-managing employee
7. Salla Lutz
Position and Reposition in Networks – Exemplified by the Transformation of the Danish Pine Furniture Manufacturers
8. Jens Forssbæck
Essays on market discipline in commercial and central banking
9. Tine Murphy
*Sense from Silence – A Basis for Organised Action
How do Sensemaking Processes with Minimal Sharing Relate to the Reproduction of Organised Action?*
10. Sara Malou Strandvad
Inspirations for a new sociology of art: A sociomaterial study of development processes in the Danish film industry
11. Nicolaas Mouton
*On the evolution of social scientific metaphors:
A cognitive-historical enquiry into the divergent trajectories of the idea that collective entities – states and societies, cities and corporations – are biological organisms.*
12. Lars Andreas Knutsen
*Mobile Data Services:
Shaping of user engagements*
13. Nikolaos Theodoros Korfiatis
*Information Exchange and Behavior
A Multi-method Inquiry on Online Communities*
14. Jens Albæk
*Forestillinger om kvalitet og tværfaglighed på sygehuse
– skabelse af forestillinger i læge- og plejegrupperne angående relevans af nye idéer om kvalitetsudvikling gennem tolkningsprocesser*
15. Maja Lotz
The Business of Co-Creation – and the Co-Creation of Business
16. Gitte P. Jakobsen
Narrative Construction of Leader Identity in a Leader Development Program Context
17. Dorte Hermansen
*“Living the brand” som en brandorienteret dialogisk praksis:
Om udvikling af medarbejdernes brandorienterede dømmekraft*
18. Aseem Kinra
Supply Chain (logistics) Environmental Complexity
19. Michael Nørager
How to manage SMEs through the transformation from non innovative to innovative?
20. Kristin Wallevik
*Corporate Governance in Family Firms
The Norwegian Maritime Sector*
21. Bo Hansen Hansen
*Beyond the Process
Enriching Software Process Improvement with Knowledge Management*
22. Annemette Skot-Hansen
*Franske adjektivisk afledte adverbier, der tager præpositionssyntagmer indledt med præpositionen à som argumenter
En valensgrammatisk undersøgelse*
23. Line Gry Knudsen
*Collaborative R&D Capabilities
In Search of Micro-Foundations*

24. Christian Scheuer
*Employers meet employees
Essays on sorting and globalization*
25. Rasmus Johnsen
*The Great Health of Melancholy
A Study of the Pathologies of Performativity*
26. Ha Thi Van Pham
*Internationalization, Competitiveness
Enhancement and Export Performance
of Emerging Market Firms:
Evidence from Vietnam*
27. Henriette Balieu
*Kontrollbegrebets betydning for kausal-
tivalternationen i spansk
En kognitiv-typologisk analyse*
- 2010**
1. Yen Tran
*Organizing Innovation in Turbulent
Fashion Market
Four papers on how fashion firms create
and appropriate innovation value*
2. Anders Rastrup Kristensen
*Metaphysical Labour
Flexibility, Performance and Commitment
in Work-Life Management*
3. Margrét Sigrún Sigurdardóttir
*Dependently independent
Co-existence of institutional logics in
the recorded music industry*
4. Ásta Dis Óladóttir
*Internationalization from a small domestic
base:
An empirical analysis of Economics and
Management*
5. Christine Secher
*E-deltagelse i praksis – politikernes og
forvaltningens medkonstruktion og
konsekvenserne heraf*
6. Marianne Stang Våland
*What we talk about when we talk
about space:*
7. Rex Degnegaard
*Strategic Change Management
Change Management Challenges in
the Danish Police Reform*
8. Ulrik Schultz Brix
*Værdi i rekruttering – den sikre beslutning
En pragmatisk analyse af perception
og synliggørelse af værdi i rekrutterings-
og udvælgelsesarbejdet*
9. Jan Ole Similå
*Kontraktsledelse
Relasjonen mellom virksomhetsledelse
og kontraktshåndtering, belyst via fire
norske virksomheter*
10. Susanne Boch Waldorff
*Emerging Organizations: In between
local translation, institutional logics
and discourse*
11. Brian Kane
*Performance Talk
Next Generation Management of
Organizational Performance*
12. Lars Ohnemus
*Brand Thrust: Strategic Branding and
Shareholder Value
An Empirical Reconciliation of two
Critical Concepts*
13. Jesper Schlamovitz
*Håndtering af usikkerhed i film- og
byggeprojekter*
14. Tommy Moesby-Jensen
*Det faktiske livs forbindelse
Føroskratisk informeret, ny-aristotelisk
ἦθος-tænkning hos Martin Heidegger*
15. Christian Fich
*Two Nations Divided by Common
Values
French National Habitus and the
Rejection of American Power*

16. Peter Beyer
Processer, sammenhængskraft og fleksibilitet
Et empirisk casestudie af omstillingsforløb i fire virksomheder
17. Adam Buchhorn
Markets of Good Intentions
Constructing and Organizing Biogas Markets Amid Fragility and Controversy
18. Cecilie K. Moesby-Jensen
Social læring og fælles praksis
Et mixed method studie, der belyser læringskonsekvenser af et lederkursus for et praksisfællesskab af offentlige mellemledere
19. Heidi Boye
Fødevarer og sundhed i senmodernismen
– En indsigt i hyggefænomenet og de relaterede fødevarerpraksisser
20. Kristine Munkgård Pedersen
Flygtige forbindelser og midlertidige mobiliseringer
Om kulturel produktion på Roskilde Festival
21. Oliver Jacob Weber
Causes of Intercompany Harmony in Business Markets – An Empirical Investigation from a Dyad Perspective
22. Susanne Ekman
Authority and Autonomy
Paradoxes of Modern Knowledge Work
23. Anette Frey Larsen
Kvalitetsledelse på danske hospitaler
– Ledelsernes indflydelse på introduktion og vedligeholdelse af kvalitetsstrategier i det danske sundhedsvæsen
24. Toyoko Sato
Performativity and Discourse: Japanese Advertisements on the Aesthetic Education of Desire
25. Kenneth Brinch Jensen
Identifying the Last Planner System
Lean management in the construction industry
26. Javier Busquets
Orchestrating Network Behavior for Innovation
27. Luke Patey
The Power of Resistance: India's National Oil Company and International Activism in Sudan
28. Mette Vedel
Value Creation in Triadic Business Relationships. Interaction, Interconnection and Position
29. Kristian Tørning
Knowledge Management Systems in Practice – A Work Place Study
30. Qingxin Shi
An Empirical Study of Thinking Aloud
Usability Testing from a Cultural Perspective
31. Tanja Juul Christiansen
Corporate blogging: Medarbejderes kommunikative handlekraft
32. Malgorzata Ciesielska
Hybrid Organisations.
A study of the Open Source – business setting
33. Jens Dick-Nielsen
Three Essays on Corporate Bond Market Liquidity
34. Sabrina Speiermann
Modstandens Politik
Kampagnestyling i Velfærdsstaten.
En diskussion af trafikcampagners styringspotentiale
35. Julie Uldam
Fickle Commitment. Fostering political engagement in 'the flighty world of online activism'

36. Annegrete Juul Nielsen
Traveling technologies and transformations in health care
37. Athur Mühlen-Schulte
*Organising Development
Power and Organisational Reform in the United Nations Development Programme*
38. Louise Rygaard Jonas
*Branding på butiksgulvet
Et case-studie af kultur- og identitetsarbejdet i Kvickly*
8. Ole Helby Petersen
Public-Private Partnerships: Policy and Regulation – With Comparative and Multi-level Case Studies from Denmark and Ireland
9. Morten Krogh Petersen
‘Good’ Outcomes. Handling Multiplicity in Government Communication
10. Kristian Tangsgaard Hvelplund
Allocation of cognitive resources in translation - an eye-tracking and key-logging study

2011

1. Stefan Fraenkel
*Key Success Factors for Sales Force Readiness during New Product Launch
A Study of Product Launches in the Swedish Pharmaceutical Industry*
2. Christian Plesner Rossing
International Transfer Pricing in Theory and Practice
3. Tobias Dam Hede
Samtalekunst og ledelsesdisciplin – en analyse af coachingsdiskursens genealogi og governmentality
4. Kim Pettersson
Essays on Audit Quality, Auditor Choice, and Equity Valuation
5. Henrik Merkelsen
The expert-lay controversy in risk research and management. Effects of institutional distances. Studies of risk definitions, perceptions, management and communication
6. Simon S. Torp
Employee Stock Ownership: Effect on Strategic Management and Performance
7. Mie Harder
Internal Antecedents of Management Innovation
11. Moshe Yonatany
The Internationalization Process of Digital Service Providers
12. Anne Vestergaard
*Distance and Suffering
Humanitarian Discourse in the age of Mediatization*
13. Thorsten Mikkelsen
Personlighedens indflydelse på forretningsrelationer
14. Jane Thostrup Jagd
*Hvorfor fortsætter fusionsbølgen udover “the tipping point”?
– en empirisk analyse af information og kognitioner om fusioner*
15. Gregory Gimpel
Value-driven Adoption and Consumption of Technology: Understanding Technology Decision Making
16. Thomas Stengade Sønderskov
*Den nye mulighed
Social innovation i en forretningsmæssig kontekst*
17. Jeppe Christoffersen
Donor supported strategic alliances in developing countries
18. Vibeke Vad Baunsgaard
Dominant Ideological Modes of Rationality: Cross functional

- integration in the process of product innovation*
19. Throstur Olaf Sigurjonsson
Governance Failure and Iceland's Financial Collapse
 20. Allan Sall Tang Andersen
Essays on the modeling of risks in interest-rate and inflation markets
 21. Heidi Tscherning
Mobile Devices in Social Contexts
 22. Birgitte Gorm Hansen
Adapting in the Knowledge Economy Lateral Strategies for Scientists and Those Who Study Them
 23. Kristina Vaarst Andersen
Optimal Levels of Embeddedness The Contingent Value of Networked Collaboration
 24. Justine Grøn­bæk Pors
Noisy Management A History of Danish School Governing from 1970-2010
 25. Stefan Linder
Micro-foundations of Strategic Entrepreneurship Essays on Autonomous Strategic Action
 26. Xin Li
Toward an Integrative Framework of National Competitiveness An application to China
 27. Rune Thorbjørn Clausen
Værdifuld arkitektur Et eksplorativt studie af bygningers rolle i virksomheders værdiskabelse
 28. Monica Viken
Markedsundersøkelser som bevis i varemerke- og markedsføringsrett
 29. Christian Wymann
Tattooing The Economic and Artistic Constitution of a Social Phenomenon
 30. Sanne Frandsen
Productive Incoherence A Case Study of Branding and Identity Struggles in a Low-Prestige Organization
 31. Mads Stenbo Nielsen
Essays on Correlation Modelling
 32. Ivan Häuser
Følelse og sprog Etablering af en ekspressiv kategori, eksemplificeret på russisk
 33. Sebastian Schwenen
Security of Supply in Electricity Markets
- 2012**
1. Peter Holm Andreasen
The Dynamics of Procurement Management - A Complexity Approach
 2. Martin Haulrich
Data-Driven Bitext Dependency Parsing and Alignment
 3. Line Kirkegaard
Konsulenten i den anden nat En undersøgelse af det intense arbejds­liv
 4. Tonny Stenheim
Decision usefulness of goodwill under IFRS
 5. Morten Lind Larsen
Produktivitet, vækst og velfærd Industrirådet og efterkrigstidens Danmark 1945 - 1958
 6. Petter Berg
Cartel Damages and Cost Asymmetries
 7. Lynn Kahle
Experiential Discourse in Marketing A methodical inquiry into practice and theory
 8. Anne Roelsgaard Obling
Management of Emotions in Accelerated Medical Relationships

9. Thomas Frandsen
Managing Modularity of Service Processes Architecture
10. Carina Christine Skovmøller
*CSR som noget særligt
Et casestudie om styring og menings-
skabelse i relation til CSR ud fra en
intern optik*
11. Michael Tell
*Fradragsbeskæring af selskabers
finansieringsudgifter
En skatteretlig analyse af SEL §§ 11,
11B og 11C*
12. Morten Holm
*Customer Profitability Measurement
Models
Their Merits and Sophistication
across Contexts*
13. Katja Joo Dyppe
*Beskatning af derivater
En analyse af dansk skatteret*
14. Esben Anton Schultz
*Essays in Labor Economics
Evidence from Danish Micro Data*
15. Carina Risvig Hansen
*"Contracts not covered, or not fully
covered, by the Public Sector Directive"*
16. Anja Svejgaard Pors
*Iværksættelse af kommunikation
- patientfigurer i hospitalets strategiske
kommunikation*
17. Frans Bévort
*Making sense of management with
logics
An ethnographic study of accountants
who become managers*
18. René Kallestrup
*The Dynamics of Bank and Sovereign
Credit Risk*
19. Brett Crawford
*Revisiting the Phenomenon of Interests
in Organizational Institutionalism
The Case of U.S. Chambers of
Commerce*
20. Mario Daniele Amore
Essays on Empirical Corporate Finance
21. Arne Stjernholm Madsen
*The evolution of innovation strategy
Studied in the context of medical
device activities at the pharmaceutical
company Novo Nordisk A/S in the
period 1980-2008*
22. Jacob Holm Hansen
*Is Social Integration Necessary for
Corporate Branding?
A study of corporate branding
strategies at Novo Nordisk*
23. Stuart Webber
*Corporate Profit Shifting and the
Multinational Enterprise*
24. Helene Ratner
*Promises of Reflexivity
Managing and Researching
Inclusive Schools*
25. Therese Strand
*The Owners and the Power: Insights
from Annual General Meetings*
26. Robert Gavin Strand
*In Praise of Corporate Social
Responsibility Bureaucracy*
27. Nina Sormunen
*Auditor's going-concern reporting
Reporting decision and content of the
report*
28. John Bang Mathiasen
*Learning within a product development
working practice:
- an understanding anchored
in pragmatism*
29. Philip Holst Riis
*Understanding Role-Oriented Enterprise
Systems: From Vendors to Customers*
30. Marie Lisa Dacanay
*Social Enterprises and the Poor
Enhancing Social Entrepreneurship and
Stakeholder Theory*

31. Fumiko Kano Glückstad
Bridging Remote Cultures: Cross-lingual concept mapping based on the information receiver's prior-knowledge
32. Henrik Barslund Fosse
Empirical Essays in International Trade
33. Peter Alexander Albrecht
*Foundational hybridity and its reproduction
Security sector reform in Sierra Leone*
34. Maja Rosenstock
*CSR - hvor svært kan det være?
Kulturanalytisk casestudie om udfordringer og dilemmaer med at forankre Coops CSR-strategi*
35. Jeanette Rasmussen
*Tweens, medier og forbrug
Et studie af 10-12 årige danske børns brug af internettet, opfattelse og forståelse af markedsføring og forbrug*
36. Ib Tunby Gulbrandsen
*'This page is not intended for a US Audience'
A five-act spectacle on online communication, collaboration & organization.*
37. Kasper Aalling Teilmann
Interactive Approaches to Rural Development
38. Mette Mogensen
*The Organization(s) of Well-being and Productivity
(Re)assembling work in the Danish Post*
39. Søren Friis Møller
*From Disinterestedness to Engagement
Towards Relational Leadership In the Cultural Sector*
40. Nico Peter Berhausen
Management Control, Innovation and Strategic Objectives – Interactions and Convergence in Product Development Networks
41. Balder Onarheim
*Creativity under Constraints
Creativity as Balancing 'Constrainedness'*
42. Haoyong Zhou
Essays on Family Firms
43. Elisabeth Naima Mikkelsen
*Making sense of organisational conflict
An empirical study of enacted sense-making in everyday conflict at work*
- 2013**
1. Jacob Lyngsie
Entrepreneurship in an Organizational Context
2. Signe Groth-Brodersen
*Fra ledelse til selvet
En socialpsykologisk analyse af forholdet imellem selvedelse, ledelse og stress i det moderne arbejdsliv*
3. Nis Høyrup Christensen
Shaping Markets: A Neoinstitutional Analysis of the Emerging Organizational Field of Renewable Energy in China
4. Christian Edelvold Berg
*As a matter of size
THE IMPORTANCE OF CRITICAL MASS AND THE CONSEQUENCES OF SCARCITY FOR TELEVISION MARKETS*
5. Christine D. Isakson
*Coworker Influence and Labor Mobility
Essays on Turnover, Entrepreneurship and Location Choice in the Danish Maritime Industry*
6. Niels Joseph Jerne Lennon
*Accounting Qualities in Practice
Rhizomatic stories of representational faithfulness, decision making and control*
7. Shannon O'Donnell
*Making Ensemble Possible
How special groups organize for collaborative creativity in conditions of spatial variability and distance*

8. Robert W. D. Veitch
*Access Decisions in a Partly-Digital World
Comparing Digital Piracy and Legal Modes for Film and Music*
9. Marie Mathiesen
*Making Strategy Work
An Organizational Ethnography*
10. Arisa Shollo
The role of business intelligence in organizational decision-making
11. Mia Kaspersen
The construction of social and environmental reporting
12. Marcus Møller Larsen
The organizational design of offshoring
13. Mette Ohm Rørdam
*EU Law on Food Naming
The prohibition against misleading names in an internal market context*
14. Hans Peter Rasmussen
*GIV EN GED!
Kan giver-idealiteter forklare støtte til velgørenhed og understøtte relationsopbygning?*
15. Ruben Schachtenhaufen
Fonetisk reduktion i dansk
16. Peter Koerver Schmidt
*Dansk CFC-beskatning
I et internationalt og komparativt perspektiv*
17. Morten Froholdt
*Strategi i den offentlige sektor
En kortlægning af styringsmæssig kontekst, strategisk tilgang, samt anvendte redskaber og teknologier for udvalgte danske statslige styrelser*
18. Annette Camilla Sjørup
*Cognitive effort in metaphor translation
An eye-tracking and key-logging study*
19. Tamara Stucchi
*The Internationalization of Emerging Market Firms:
A Context-Specific Study*
20. Thomas Lopdrup-Hjorth
*"Let's Go Outside":
The Value of Co-Creation*
21. Ana Alačovska
*Genre and Autonomy in Cultural Production
The case of travel guidebook production*
22. Marius Gudmand-Høyer
*Stemningsindssygdommens historie i det 19. århundrede
Omtydningen af melankolien og manien som bipolære stemningslidelser i dansk sammenhæng under hensyn til dannelsen af det moderne følelselivs relative autonomi.
En problematiserings- og erfarings-analytisk undersøgelse*
23. Lichen Alex Yu
*Fabricating an S&OP Process
Circulating References and Matters of Concern*
24. Esben Alfort
*The Expression of a Need
Understanding search*
25. Trine Pallesen
*Assembling Markets for Wind Power
An Inquiry into the Making of Market Devices*
26. Anders Koed Madsen
*Web-Visions
Repurposing digital traces to organize social attention*
27. Lærke Højgaard Christiansen
BREWING ORGANIZATIONAL RESPONSES TO INSTITUTIONAL LOGICS
28. Tommy Kjær Lassen
*EGENTLIG SELVLEDELSE
En ledelsesfilosofisk afhandling om selvledelsens paradoksale dynamik og eksistentielle engagement*

29. Morten Rossing
Local Adaption and Meaning Creation in Performance Appraisal
30. Søren Obed Madsen
*Lederen som oversætter
Et oversættelsesteoretisk perspektiv på strategisk arbejde*
31. Thomas Høgenhaven
*Open Government Communities
Does Design Affect Participation?*
32. Kirstine Zinck Pedersen
*Failsafe Organizing?
A Pragmatic Stance on Patient Safety*
33. Anne Petersen
*Hverdagslogikker i psykiatrisk arbejde
En institutionsetnografisk undersøgelse af hverdagen i psykiatriske organisationer*
34. Didde Maria Humle
Fortællinger om arbejde
35. Mark Holst-Mikkelsen
*Strategieksekvering i praksis
– barrierer og muligheder!*
36. Malek Maalouf
*Sustaining lean
Strategies for dealing with organizational paradoxes*
37. Nicolaj Tofte Brenneche
*Systemic Innovation In The Making
The Social Productivity of Cartographic Crisis and Transitions in the Case of SEET*
38. Morten Gylling
*The Structure of Discourse
A Corpus-Based Cross-Linguistic Study*
39. Binzhang YANG
*Urban Green Spaces for Quality Life
- Case Study: the landscape architecture for people in Copenhagen*
40. Michael Friis Pedersen
*Finance and Organization:
The Implications for Whole Farm Risk Management*
41. Even Fallan
Issues on supply and demand for environmental accounting information
42. Ather Nawaz
*Website user experience
A cross-cultural study of the relation between users' cognitive style, context of use, and information architecture of local websites*
43. Karin Beukel
The Determinants for Creating Valuable Inventions
44. Arjan Markus
*External Knowledge Sourcing and Firm Innovation
Essays on the Micro-Foundations of Firms' Search for Innovation*
- 2014**
1. Solon Moreira
Four Essays on Technology Licensing and Firm Innovation
2. Karin Strzeletz Ivertsen
*Partnership Drift in Innovation Processes
A study of the Think City electric car development*
3. Kathrine Hoffmann Pii
Responsibility Flows in Patient-centred Prevention
4. Jane Bjørn Vedel
*Managing Strategic Research
An empirical analysis of science-industry collaboration in a pharmaceutical company*
5. Martin Gylling
*Processuel strategi i organisationer
Monografi om dobbeltheden i tænkning af strategi, dels som vidensfelt i organisationsteori, dels som kunstnerisk tilgang til at skabe i erhvervsmæssig innovation*

6. Linne Marie Lauesen
Corporate Social Responsibility in the Water Sector: How Material Practices and their Symbolic and Physical Meanings Form a Colonising Logic
7. Maggie Qiuzhu Mei
LEARNING TO INNOVATE: The role of ambidexterity, standard, and decision process
8. Inger Høedt-Rasmussen
Developing Identity for Lawyers Towards Sustainable Lawyering
9. Sebastian Fux
Essays on Return Predictability and Term Structure Modelling
10. Thorbjørn N. M. Lund-Poulsen
Essays on Value Based Management
11. Oana Brindusa Albu
Transparency in Organizing: A Performative Approach
12. Lena Olaison
Entrepreneurship at the limits
13. Hanne Sørum
DRESSED FOR WEB SUCCESS? An Empirical Study of Website Quality in the Public Sector
14. Lasse Folke Henriksen
Knowing networks How experts shape transnational governance
15. Maria Halbinger
Entrepreneurial Individuals Empirical Investigations into Entrepreneurial Activities of Hackers and Makers
16. Robert Spliid
Kapitalfondenes metoder og kompetencer
17. Christiane Stelling
Public-private partnerships & the need, development and management of trusting A processual and embedded exploration
18. Marta Gasparin
Management of design as a translation process
19. Kåre Moberg
Assessing the Impact of Entrepreneurship Education From ABC to PhD
20. Alexander Cole
Distant neighbors Collective learning beyond the cluster
21. Martin Møller Boje Rasmussen
Is Competitiveness a Question of Being Alike? How the United Kingdom, Germany and Denmark Came to Compete through their Knowledge Regimes from 1993 to 2007
22. Anders Ravn Sørensen
Studies in central bank legitimacy, currency and national identity Four cases from Danish monetary history
23. Nina Bellak
Can Language be Managed in International Business? Insights into Language Choice from a Case Study of Danish and Austrian Multinational Corporations (MNCs)
24. Rikke Kristine Nielsen
Global Mindset as Managerial Meta-competence and Organizational Capability: Boundary-crossing Leadership Cooperation in the MNC The Case of 'Group Mindset' in Solar A/S.
25. Rasmus Koss Hartmann
User Innovation inside government Towards a critically performative foundation for inquiry

26. Kristian Gylling Olesen
Flertydig og emergerende ledelse i folkeskolen
Et aktør-netværksteoretisk ledelsesstudie af politiske evalueringsreformers betydning for ledelse i den danske folkeskole
27. Troels Riis Larsen
Kampen om Danmarks omdømme 1945-2010
Omdømmearbejde og omdømmepolitik
28. Klaus Majgaard
Jagten på autenticitet i offentlig styring
29. Ming Hua Li
Institutional Transition and Organizational Diversity: Differentiated internationalization strategies of emerging market state-owned enterprises
30. Sofie Blinkenberg Federspiel
IT, organisation og digitalisering: Institutionelt arbejde i den kommunale digitaliseringsproces
31. Elvi Weinreich
Hvilke offentlige ledere er der brug for når velfærdstænkningen flytter sig – er Diplomuddannelsens lederprofil svaret?
32. Ellen Mølgaard Korsager
Self-conception and image of context in the growth of the firm – A Penrosian History of Fiberline Composites
33. Else Skjold
The Daily Selection
34. Marie Louise Conradsen
The Cancer Centre That Never Was The Organisation of Danish Cancer Research 1949-1992
35. Virgilio Failla
Three Essays on the Dynamics of Entrepreneurs in the Labor Market
36. Nicky Nedergaard
Brand-Based Innovation Relational Perspectives on Brand Logics and Design Innovation Strategies and Implementation
37. Mads Gjedsted Nielsen
Essays in Real Estate Finance
38. Kristin Martina Brandl
Process Perspectives on Service Offshoring
39. Mia Rosa Koss Hartmann
In the gray zone With police in making space for creativity
40. Karen Ingerslev
Healthcare Innovation under The Microscope Framing Boundaries of Wicked Problems
41. Tim Neerup Thomsen
Risk Management in large Danish public capital investment programmes
- 2015**
1. Jakob Ion Wille
Film som design Design af levende billeder i film og tv-serier
2. Christiane Mossin
Interzones of Law and Metaphysics Hierarchies, Logics and Foundations of Social Order seen through the Prism of EU Social Rights
3. Thomas Tøth
TRUSTWORTHINESS: ENABLING GLOBAL COLLABORATION An Ethnographic Study of Trust, Distance, Control, Culture and Boundary Spanning within Offshore Outsourcing of IT Services
4. Steven Højlund
Evaluation Use in Evaluation Systems – The Case of the European Commission

5. Julia Kirch Kirkegaard
AMBIGUOUS WINDS OF CHANGE – OR FIGHTING AGAINST WINDMILLS IN CHINESE WIND POWER
A CONSTRUCTIVIST INQUIRY INTO CHINA'S PRAGMATICS OF GREEN MARKETISATION
MAPPING CONTROVERSIES OVER A POTENTIAL TURN TO QUALITY IN CHINESE WIND POWER
6. Michelle Carol Antero
A Multi-case Analysis of the Development of Enterprise Resource Planning Systems (ERP) Business Practices

Morten Friis-Olivarius
The Associative Nature of Creativity
7. Mathew Abraham
New Cooperativism: A study of emerging producer organisations in India
8. Stine Hedegaard
Sustainability-Focused Identity: Identity work performed to manage, negotiate and resolve barriers and tensions that arise in the process of constructing or ganizational identity in a sustainability context
9. Cecilie Glerup
Organizing Science in Society – the conduct and justification of resposable research
10. Allan Salling Pedersen
Implementering af ITIL® IT-governance - når best practice konflikter med kulturen
Løsning af implementerings-problemer gennem anvendelse af kendte CSF i et aktionsforskningsforløb.
11. Nihat Misir
A Real Options Approach to Determining Power Prices
12. Mamdouh Medhat
MEASURING AND PRICING THE RISK OF CORPORATE FAILURES
13. Rina Hansen
Toward a Digital Strategy for Omnichannel Retailing
14. Eva Pallesen
In the rhythm of welfare creation
A relational processual investigation moving beyond the conceptual horizon of welfare management
15. Gouya Harirchi
In Search of Opportunities: Three Essays on Global Linkages for Innovation
16. Lotte Holck
Embedded Diversity: A critical ethnographic study of the structural tensions of organizing diversity
17. Jose Daniel Balarezo
Learning through Scenario Planning
18. Louise Pram Nielsen
Knowledge dissemination based on terminological ontologies. Using eye tracking to further user interface design.
19. Sofie Dam
PUBLIC-PRIVATE PARTNERSHIPS FOR INNOVATION AND SUSTAINABILITY TRANSFORMATION
An embedded, comparative case study of municipal waste management in England and Denmark
20. Ulrik Hartmyer Christiansen
Follwoing the Content of Reported Risk Across the Organization
21. Guro Refsum Sanden
Language strategies in multinational corporations. A cross-sector study of financial service companies and manufacturing companies.
22. Linn Gevoll
Designing performance management for operational level
- A closer look on the role of design choices in framing coordination and motivation

23. Frederik Larsen
*Objects and Social Actions
– on Second-hand Valuation Practices*
24. Thorhildur Hansdottir Jetzek
*The Sustainable Value of Open
Government Data
Uncovering the Generative Mechanisms
of Open Data through a Mixed
Methods Approach*
25. Gustav Toppenberg
*Innovation-based M&A
– Technological-Integration
Challenges – The Case of
Digital-Technology Companies*
26. Mie Plotnikof
*Challenges of Collaborative
Governance
An Organizational Discourse Study
of Public Managers' Struggles
with Collaboration across the
Daycare Area*
27. Christian Garmann Johnsen
*Who Are the Post-Bureaucrats?
A Philosophical Examination of the
Creative Manager, the Authentic Leader
and the Entrepreneur*
28. Jacob Brogaard-Kay
*Constituting Performance Management
A field study of a pharmaceutical
company*
29. Rasmus Ploug Jenle
*Engineering Markets for Control:
Integrating Wind Power into the Danish
Electricity System*
30. Morten Lindholst
*Complex Business Negotiation:
Understanding Preparation and
Planning*
31. Morten Grynings
*TRUST AND TRANSPARENCY FROM AN
ALIGNMENT PERSPECTIVE*
32. Peter Andreas Norn
*Byregimer og styringsevne: Politisk
lederskab af store byudviklingsprojekter*
33. Milan Miric
*Essays on Competition, Innovation and
Firm Strategy in Digital Markets*
34. Sanne K. Hjordrup
*The Value of Talent Management
Rethinking practice, problems and
possibilities*
35. Johanna Sax
*Strategic Risk Management
– Analyzing Antecedents and
Contingencies for Value Creation*
36. Pernille Rydén
Strategic Cognition of Social Media
37. Mimmi Sjöklint
*The Measurable Me
- The Influence of Self-tracking on the
User Experience*
38. Juan Ignacio Staricco
*Towards a Fair Global Economic
Regime? A critical assessment of Fair
Trade through the examination of the
Argentinean wine industry*
39. Marie Henriette Madsen
*Emerging and temporary connections
in Quality work*
40. Yangfeng CAO
*Toward a Process Framework of
Business Model Innovation in the
Global Context
Entrepreneurship-Enabled Dynamic
Capability of Medium-Sized
Multinational Enterprises*
41. Carsten Scheibye
*Enactment of the Organizational Cost
Structure in Value Chain Configuration
A Contribution to Strategic Cost
Management*

2016

1. Signe Sofie Dyrby
Enterprise Social Media at Work
2. Dorte Boesby Dahl
*The making of the public parking attendant
Dirt, aesthetics and inclusion in public service work*
3. Verena Girschik
*Realizing Corporate Responsibility
Positioning and Framing in Nascent Institutional Change*
4. Anders Ørding Olsen
*IN SEARCH OF SOLUTIONS
Inertia, Knowledge Sources and Diversity in Collaborative Problem-solving*
5. Pernille Steen Pedersen
*Udkast til et nyt copingbegreb
En kvalifikation af ledelsesmuligheder for at forebygge sygefravær ved psykiske problemer.*
6. Kerli Kant Hvass
*Weaving a Path from Waste to Value:
Exploring fashion industry business models and the circular economy*
7. Kasper Lindskow
*Exploring Digital News Publishing
Business Models – a production network approach*
8. Mikkel Mouritz Marfelt
*The chameleon workforce:
Assembling and negotiating the content of a workforce*
9. Marianne Bertelsen
*Aesthetic encounters
Rethinking autonomy, space & time in today's world of art*
10. Louise Hauberg Wilhelmsen
EU PERSPECTIVES ON INTERNATIONAL COMMERCIAL ARBITRATION
11. Abid Hussain
On the Design, Development and Use of the Social Data Analytics Tool (SODATO): Design Propositions, Patterns, and Principles for Big Social Data Analytics
12. Mark Bruun
Essays on Earnings Predictability
13. Tor Bøe-Lillegraven
BUSINESS PARADOXES, BLACK BOXES, AND BIG DATA: BEYOND ORGANIZATIONAL AMBIDEXTERITY
14. Hadis Khonsary-Atighi
ECONOMIC DETERMINANTS OF DOMESTIC INVESTMENT IN AN OIL-BASED ECONOMY: THE CASE OF IRAN (1965-2010)
15. Maj Lervad Grasten
*Rule of Law or Rule by Lawyers?
On the Politics of Translation in Global Governance*
16. Lene Granzau Juel-Jacobsen
SUPERMARKEDETS MODUS OPERANDI – en hverdagssociologisk undersøgelse af forholdet mellem rum og handlen og understøtte relationsopbygning?
17. Christine Thalsgård Henriques
In search of entrepreneurial learning – Towards a relational perspective on incubating practices?
18. Patrick Bennett
Essays in Education, Crime, and Job Displacement
19. Søren Korsgaard
Payments and Central Bank Policy
20. Marie Kruse Skibsted
Empirical Essays in Economics of Education and Labor
21. Elizabeth Benedict Christensen
*The Constantly Contingent Sense of Belonging of the 1.5 Generation
Undocumented Youth
An Everyday Perspective*

22. Lasse J. Jessen
Essays on Discounting Behavior and Gambling Behavior
23. Kalle Johannes Rose
*Når stifterviljen dør...
Et retsøkonomisk bidrag til 200 års
juridisk konflikt om ejendomsretten*
24. Andreas Søeborg Kirkedal
*Danish Stød and Automatic Speech
Recognition*
25. Ida Lunde Jørgensen
*Institutions and Legitimations in
Finance for the Arts*
26. Olga Rykov Ibsen
*An empirical cross-linguistic study of
directives: A semiotic approach to the
sentence forms chosen by British,
Danish and Russian speakers in native
and ELF contexts*
27. Desi Volker
Understanding Interest Rate Volatility
28. Angeli Elizabeth Weller
*Practice at the Boundaries of Business
Ethics & Corporate Social Responsibility*
29. Ida Danneskiold-Samsøe
*Levende læring i kunstneriske
organisationer
En undersøgelse af læringsprocesser
mellem projekt og organisation på
Aarhus Teater*
30. Leif Christensen
*Quality of information – The role of
internal controls and materiality*
31. Olga Zarzecka
Tie Content in Professional Networks
32. Henrik Mahncke
*De store gaver
- Filantropiens gensidighedsrelationer i
teori og praksis*
33. Carsten Lund Pedersen
*Using the Collective Wisdom of
Frontline Employees in Strategic Issue
Management*
34. Yun Liu
Essays on Market Design
35. Denitsa Hazarbasanova Blagoeva
The Internationalisation of Service Firms
36. Manya Jaura Lind
*Capability development in an off-
shoring context: How, why and by
whom*
37. Luis R. Boscán F.
*Essays on the Design of Contracts and
Markets for Power System Flexibility*
38. Andreas Philipp Distel
*Capabilities for Strategic Adaptation:
Micro-Foundations, Organizational
Conditions, and Performance
Implications*
39. Lavinia Bleoca
*The Usefulness of Innovation and
Intellectual Capital in Business
Performance: The Financial Effects of
Knowledge Management vs. Disclosure*
40. Henrik Jensen
*Economic Organization and Imperfect
Managerial Knowledge: A Study of the
Role of Managerial Meta-Knowledge
in the Management of Distributed
Knowledge*
41. Stine Mosekjær
*The Understanding of English Emotion
Words by Chinese and Japanese
Speakers of English as a Lingua Franca
An Empirical Study*
42. Hallur Tor Sigurdarson
*The Ministry of Desire - Anxiety and
entrepreneurship in a bureaucracy*
43. Kätlin Pulk
*Making Time While Being in Time
A study of the temporality of
organizational processes*
44. Valeria Giacomini
*Contextualizing the cluster Palm oil in
Southeast Asia in global perspective
(1880s–1970s)*

45. Jeanette Willert
Managers' use of multiple Management Control Systems: The role and interplay of management control systems and company performance
46. Mads Vestergaard Jensen
Financial Frictions: Implications for Early Option Exercise and Realized Volatility
47. Mikael Reimer Jensen
Interbank Markets and Frictions
48. Benjamin Faigen
Essays on Employee Ownership
49. Adela Michea
Enacting Business Models: An Ethnographic Study of an Emerging Business Model Innovation within the Frame of a Manufacturing Company.
50. Iben Sandal Stjerne
Transcending organization in temporary systems: Aesthetics' organizing work and employment in Creative Industries
51. Simon Krogh
Anticipating Organizational Change
52. Sarah Netter
Exploring the Sharing Economy
53. Lene Tolstrup Christensen
State-owned enterprises as institutional market actors in the marketization of public service provision: A comparative case study of Danish and Swedish passenger rail 1990–2015
54. Kyoung(Kay) Sun Park
Three Essays on Financial Economics
- 2017**
1. Mari Bjerck
Apparel at work. Work uniforms and women in male-dominated manual occupations.
2. Christoph H. Flöthmann
Who Manages Our Supply Chains? Backgrounds, Competencies and Contributions of Human Resources in Supply Chain Management
3. Aleksandra Anna Rzeźnik
Essays in Empirical Asset Pricing
4. Claes Bäckman
Essays on Housing Markets
5. Kirsti Reitan Andersen
Stabilizing Sustainability in the Textile and Fashion Industry
6. Kira Hoffmann
Cost Behavior: An Empirical Analysis of Determinants and Consequences of Asymmetries
7. Tobin Hanspal
Essays in Household Finance
8. Nina Lange
Correlation in Energy Markets
9. Anjum Fayyaz
Donor Interventions and SME Networking in Industrial Clusters in Punjab Province, Pakistan
10. Magnus Paulsen Hansen
Trying the unemployed. Justification and critique, emancipation and coercion towards the 'active society'. A study of contemporary reforms in France and Denmark
11. Sameer Azizi
Corporate Social Responsibility in Afghanistan – a critical case study of the mobile telecommunications industry

12. Malene Myhre
The internationalization of small and medium-sized enterprises: A qualitative study
13. Thomas Presskorn-Thygesen
The Significance of Normativity – Studies in Post-Kantian Philosophy and Social Theory
14. Federico Clementi
Essays on multinational production and international trade
15. Lara Anne Hale
Experimental Standards in Sustainability Transitions: Insights from the Building Sector
16. Richard Pucci
*Accounting for Financial Instruments in an Uncertain World
Controversies in IFRS in the Aftermath of the 2008 Financial Crisis*
17. Sarah Maria Denta
*Kommunale offentlige private partnerskaber
Regulering I skyggen af Farumsagen*
18. Christian Östlund
Design for e-training
19. Amalie Martinus Hauge
Organizing Valuations – a pragmatic inquiry
20. Tim Holst Celik
Tension-filled Governance? Exploring the Emergence, Consolidation and Reconfiguration of Legitimatory and Fiscal State-crafting
21. Christian Bason
Leading Public Design: How managers engage with design to transform public governance
22. Davide Tomio
Essays on Arbitrage and Market Liquidity
23. Simone Stæhr
*Financial Analysts' Forecasts
Behavioral Aspects and the Impact of Personal Characteristics*
24. Mikkel Godt Gregersen
Management Control, Intrinsic Motivation and Creativity – How Can They Coexist
25. Kristjan Johannes Suse Jespersen
Advancing the Payments for Ecosystem Service Discourse Through Institutional Theory
26. Kristian Bondo Hansen
Crowds and Speculation: A study of crowd phenomena in the U.S. financial markets 1890 to 1940
27. Lars Balslev
Actors and practices – An institutional study on management accounting change in Air Greenland
28. Sven Klingler
Essays on Asset Pricing with Financial Frictions
29. Klement Ahrensbach Rasmussen
*Business Model Innovation
The Role of Organizational Design*
30. Giulio Zichella
*Entrepreneurial Cognition.
Three essays on entrepreneurial behavior and cognition under risk and uncertainty*
31. Richard Ledborg Hansen
En forkærlighed til det eksisterende – mellemederens oplevelse af forandringsmodstand i organisatoriske forandringer
32. Vilhelm Stefan Holsting
Militært chefvirke: Kritik og retfærdiggørelse mellem politik og profession

33. Thomas Jensen **2018**
Shipping Information Pipeline: An information infrastructure to improve international containerized shipping
34. Dzmityr Bartalevich
Do economic theories inform policy? Analysis of the influence of the Chicago School on European Union competition policy
35. Kristian Roed Nielsen
Crowdfunding for Sustainability: A study on the potential of reward-based crowdfunding in supporting sustainable entrepreneurship
36. Emil Husted
There is always an alternative: A study of control and commitment in political organization
37. Anders Ludvig Sevelsted
Interpreting Bonds and Boundaries of Obligation. A genealogy of the emergence and development of Protestant voluntary social work in Denmark as shown through the cases of the Copenhagen Home Mission and the Blue Cross (1850 – 1950)
38. Niklas Kohl
Essays on Stock Issuance
39. Maya Christiane Flensburg Jensen
BOUNDARIES OF PROFESSIONALIZATION AT WORK An ethnography-inspired study of care workers' dilemmas at the margin
40. Andreas Kamstrup
Crowdsourcing and the Architectural Competition as Organisational Technologies
41. Louise Lyngfeldt Gorm Hansen
Triggering Earthquakes in Science, Politics and Chinese Hydropower - A Controversy Study
1. Vishv Priya Kohli
Combating Falsification and Counterfeiting of Medicinal Products in the European Union – A Legal Analysis
2. Helle Haurum
Customer Engagement Behavior in the context of Continuous Service Relationships
3. Nis Grünberg
The Party-state order: Essays on China's political organization and political economic institutions
4. Jesper Christensen
A Behavioral Theory of Human Capital Integration
5. Poula Marie Helth
Learning in practice
6. Rasmus Vendler Toft-Kehler
Entrepreneurship as a career? An investigation of the relationship between entrepreneurial experience and entrepreneurial outcome
7. Szymon Furtak
Sensing the Future: Designing sensor-based predictive information systems for forecasting spare part demand for diesel engines
8. Mette Brehm Johansen
Organizing patient involvement. An ethnographic study
9. Iwona Sulinska
Complexities of Social Capital in Boards of Directors
10. Cecilie Fanø Petersen
Award of public contracts as a means to conferring State aid: A legal analysis of the interface between public procurement law and State aid law
11. Ahmad Ahmad Barirani
Three Experimental Studies on Entrepreneurship

12. Carsten Allerslev Olsen *Financial Reporting Enforcement: Impact and Consequences*
13. Irene Christensen
New product fumbles – Organizing for the Ramp-up process
14. Jacob Taarup-Esbensen
Managing communities – Mining MNEs' community risk management practices

TITLER I ATV PH.D.-SERIEN

1992

1. Niels Kornum
Servicesamkørsel – organisation, økonomi og planlægningsmetode

1995

2. Verner Worm
*Nordiske virksomheder i Kina
Kulturspecifikke interaktionsrelationer ved nordiske virksomhedsetableringer i Kina*

1999

3. Mogens Bjerre
*Key Account Management of Complex Strategic Relationships
An Empirical Study of the Fast Moving Consumer Goods Industry*

2000

4. Lotte Darsø
*Innovation in the Making
Interaction Research with heterogeneous Groups of Knowledge Workers creating new Knowledge and new Leads*

2001

5. Peter Hobolt Jensen
*Managing Strategic Design Identities
The case of the Lego Developer Network*

2002

6. Peter Lohmann
The Deleuzian Other of Organizational Change – Moving Perspectives of the Human
7. Anne Marie Jess Hansen
To lead from a distance: The dynamic interplay between strategy and strategizing – A case study of the strategic management process

2003

8. Lotte Henriksen
*Videndeling
– om organisatoriske og ledelsesmæssige udfordringer ved videndeling i praksis*
9. Niels Christian Nickelsen
Arrangements of Knowing: Coordinating Procedures Tools and Bodies in Industrial Production – a case study of the collective making of new products

2005

10. Carsten Ørts Hansen
Konstruktion af ledelsesteknologier og effektivitet

TITLER I DBA PH.D.-SERIEN

2007

1. Peter Kastrup-Misir
Endeavoring to Understand Market Orientation – and the concomitant co-mutation of the researched, the researcher, the research itself and the truth

2009

1. Torkild Leo Thellefsen
*Fundamental Signs and Significance effects
A Semeiotic outline of Fundamental Signs, Significance-effects, Knowledge Profiling and their use in Knowledge Organization and Branding*
2. Daniel Ronzani
When Bits Learn to Walk Don't Make Them Trip. Technological Innovation and the Role of Regulation by Law in Information Systems Research: the Case of Radio Frequency Identification (RFID)

2010

1. Alexander Carnera
*Magten over livet og livet som magt
Studier i den biopolitiske ambivalens*