THESIS PROPOSAL

FOR THE DEGREE OF:

DOCTOR OF PHILOSOPHY (PhD)

Australian National University,

School of Politics and International Relations

Contents:

I. INTRODUCTION AND RESEARCH QUESTION:

The last decade has seen the rapid expansion of mining projects throughout Latin America and an incursion by transnational mining companies into new frontiers for mineral extraction. A region with centuries of mining history, it has been recently shaped by the millennium commodities boom that has brought profound economic, social and environmental effects, both positive and negative. With sharp price spikes for the precious metals found in the region, as well as favourable regulatory environments in many of the countries due to previous neoliberal reforms (Bridge, 2004) mineral exploration took off from approximately 2003 onwards. Mining companies have ventured into areas in the region that they would before not have considered profitable. Latin America ranks as the number one destination for foreign direct investment in mining exploration worldwide, far surpassing activity in Africa and Asia (E&MJ Annual Survey, 2012). With the arrival of many new mining projects has come an increase in the number of social and environmental conflicts in Latin America, predominantly from the communities that live within the direct or indirect impact zone of the mine. Mining conflicts bring to light a complex interaction of governments (national and local); transnational corporations as influenced by world markets; and finally, individuals and communities. In this sense, political economy and related fields are well placed to analyse mining conflicts, given the diverging interests at stake and the broad view that is taken by such approaches.

This doctorate research thesis will specifically focus on the role of transnational mining companies within these conflicts as a means to more deeply understand the interactions of markets, states and individuals. My thesis will address the following research question: **What factors were important in shaping the responses of transnational mining companies in Latin America to conflicts with communities during the recent mining boom?**

My research has a role to play in broader political economy literature in relation to how market conditions interact with political and local level conditions in creating and resolving conflicts. By looking at a number of mining projects during the period of the mining boom under changing market conditions, my research aims to contribute to the field of international political economy.

The structure of this proposal is as follows: I will first outline the data and context of mining conflicts in Latin America and then review the literature that has sought to understand these conflicts. I will argue that mining companies are under-examined within this literature and that understanding their responses to conflict provides a significant contribution to the literature. I will then explain my hypothesis, which has been shaped by a preliminary examination of conflicts in the region and how transnational mining companies have responded in conflicts relating to open-cut mining for precious metals in Chile, Argentina, Peru and Mexico. This hypothesis will be conditioned upon mixed methods, which will advance in two stages: Quantitative and then qualitative (quan →QUAL). My methods will involve a quantitative regression that will examine the variables that could possibly be important in shaping mining company behaviour, and then go deeper by proposing

a comparative case study using fieldwork in two countries. I will finally examine the foreseeable limitations of my thesis, practical issues, and finally provide a proposed structure for my project.

II. CONTEXT:

The boom in metals extraction: increased prices, changing landscapes:

A number of large foreign mining companies have embarked upon ambitious extraction projects throughout Latin America in the last decade in part due to the boom in prices for the metals which are found in Latin America: silver, copper, and most importantly, gold. The price of gold has risen significantly in recent years on the back of the largest resources boom since the 1970s. Gold prices rose by more than six times between 2000 and mid-2010, rising steadily from approximately $283 USD per troy ounce in early 2000 to a high of $1813 per ounce in mid-2011, with the sharpest increases taking place from 2004 onwards. (World Gold Council, 2012). Silver and copper prices were largely similar, with a steady rise through these years, interrupted only by a dip during the financial crisis of 2008, recovering again soon afterwards. (London Metals Exchange, 2013). Since the start of the new millennium, Latin America has been seen promoted as a destination for metals extraction, (World Gold Council: 2001, CEPAL, 2004), especially in relation to many metal commodities (Bridge 2004 ; Urkidi 2010). Chile, Peru, Mexico and Argentina are all important destinations for transnational mining companies. Of relevance is their production of precious metals, given that Mexico and Peru are the top two producers of silver in

the world (Camimex, MINEM) and in the case of gold, both Mexico and Peru are in the world's top ten producers (U.S. Geological Survey , 2012). Chile has long been the world's leading copper producer (Ministerio de Minas, Chile) and Argentina also has significant reserves in copper and gold (USGS, 2012).

With this backdrop, transnational mining companies have moved into new frontiers and territories, affecting rural communities and their traditional livelihoods. This change in landscapes and geography is illustrative in helping us understand the dynamics of social conflicts that arise. By way of example, in Mexico, all the gold that was extracted during 300 years of Spanish rule was only half of that extracted between 2000 and 2010 (López Bárcenas, 2012). The behaviour of gold prices during the millennium commodities boom is illustrative of the scale of the super-cycle that has taken place over the last ten years. In regards to the extraction of gold, silver and copper – Bridge (2004b:212) has produced compelling geographical data to show that these metals produce far more waste in proportion to the amount of mineral retrieved as compared to other types of mining. Most of these new mines opened in the mining boom have been open cut mines rather than underground mines, which imply a visible transformation of landscapes as large pits have emerged throughout the region in the hope of accessing small amounts of low-grade mineral that are dispersed at low concentrations (Garibay and Boni, 2011). In this way, it is important to reflect on the type of mining that is taking place. Large open cut metal mining in particular has been a site of social conflict, given its conspicuous effect on land and water resources (Gifford et al, 2008).

The increase in mining conflicts with the boom:

Social conflicts have accompanied the transformations in the landscape brought on by increased mining exploration. Communities and social movements throughout Latin America have responded to this expansion of mining project, with slogans uniting the region such as "Water is worth more than gold" (EJOLT and others, 2013). Combined with a hybrid literature from government bodies (Defensoría del Pueblo, Peru, 2004-2013) Citizens' observatories databases (OCLAM, 2012, Propuesta Ciudadana, Peru, 2012) and university-based monitoring websites (McGill Research Group –MICLA, 2013, Mapa de Conflictos Mineros - Argentina, 2013), the data point to the fact that the number of mining conflicts in key Latin American countries have increased over the last decade with the rise in gold price (see also Hammond, 2007). By way of example, in its monthly updates, Peru's People's Ombudsman office (*Defensoría del Pueblo)* registered a steady rise in mining conflicts from 2004 onwards, with 73 social conflicts during the month of December 2005, in comparison to 247 social conflicts registered in June 2012. (Defensoria del Pueblo, 2006 and 2012). In the latter case, socio-environmental conflicts accounted for 60% of all conflicts, which is the general tendency throughout these reports, with most of these relating to mining projects (ibid). In the case of the Citizen's Observatory on Mining Conflicts in Latin America (OCLAM, 2013), an agglomerate of 40 organizations throughout the region, of the 197 mining conflicts listed in their database, approximately 70% of the conflicts listed by date commenced in the height of the mining boom after 2004. While there are clearly problems with the baseline in both of these measurements given that the Peruvian Ombudsman, the Citizens' Observatory, and the McGill

Research Group on mining began collecting their data once the mining boom had begun – in 2004, 2007 and 2007 respectively, the evidence from these and other data collection sources suggest that over the period of the mining boom, the increase in the number of mining projects has brought with it an increase in the number of mining conflicts.

III. EXISTING LITERATURE:

The literature on mining and conflicts:

Perhaps the most well-known literature on mining and its relation to social conflict is that of Resource Curse Theory. A broad range of disciplines over the last three decades have produced significant data that points to the problems that countries rich in natural resources face. Originally associated with the findings of Auty (1993) and Sachs and Warner (1997) that suggested that resource abundance was usually detrimental to economic growth, Resource Curse literature has since grown to include a variety of observations including the effects that resource abundance has on institutional quality (Karl, 1997), democracy (Collier and Hoeffler, 2009) and other political outcomes. For the present purposes, the most important area of Resource Curse Theory is that concerning the relationship of mineral endowment and conflict. In this sense, significant research has related mining to civil war and violent conflict, either by causing it or lengthening its duration and intensity, with some variation in correlations (Collier and Hoeffler, 2001, Buhaug and Gates, 2002, Ross, 2004a, 2004b, Collier and Hoeffler, 2005). Although these findings are useful, they do not provide a comprehensive understanding of the Latin American context.

In the case of Collier and Hoeffner's influential article from 2001, only four Latin American conflicts were included in their data set of civil wars, and more generally their data has been collected from Asia and Africa. The limited resource curse literature that has emerged in relation to mining conflicts in Latin America has been context-dependent and pertains not so much to high intensity civil wars, yet rather low-intensity, localized conflicts that are characteristic of the mining conflicts in the region (Arellano-Yanguas, 2011). These mining conflicts in Latin America, rather than civil wars, tend to be low-level confrontations that nevertheless are severely disruptive to the social order of region in which they occur and often have political effects at national levels. These conflicts at some times involving deaths and injuries to the protestors involved and destruction to the mining sites in question, without becoming full civil wars. At other times, legal conflict can ensue between communities and companies. Thus notwithstanding the importance of Resource Curse literature, it has fallen short on analysing mining conflicts in Latin America.

The literature that does address these conflicts looks at two issues: The causes of the conflicts, and the ways that communities respond to them. In terms of causes, one useful summary (GRADE: 2012) outlines four main causes of recent extractive sector conflicts in Latin America: 1) The geographic expansion of projects beyond traditional "old" mining areas into new frontiers where communities have not formerly been exposed to extractive projects (see also De Echave, 2005); 2) The breakdown of traditional agreements which had placated dissent by providing considerable employment benefits – these agreements have been eroded by open-cut mining which requires natural resources on a large scale and has meant conflicts are

more about the environment than jobs these days (GRADE: 2012: 2), 3) Disputes over the sharing of excessive revenues that have emerged during the mining boom and 4) Corruption or violence at work within and around the large-scale mining projects (ibid).

Furthermore, a steadily growing literature from human geography, political economy and political ecology has emerged in the new millennium seeking to understand the conflicts between rural communities in Latin America and large mining companies, with a particular focus on how community and social movements shape their responses. One part of the literature seeks to understand how communities empower themselves and organize their movements in response to the arrival of translational companies, providing worthy analyses that dissect the dynamics of socio-environmental mobilisation and how these dynamics are articulated from within and without (Evans, 2002, Martinez-Alier, 2004, Martinez-Alier and Walter, 2010, Urkidi, 2011, Dougherty, 2011, Himley, 2013, Bebbington et. al, 2013). The other part of the literature, more instructive for current purposes, has provided important typologies of conflicts that help us to make sense of community-based opposition (Echave, 2005, Bebbington et. al: 2008; Bebbington and Humphreys: 2009; Arellano-Yanguas: 2011). By way of example, Bebbington (2009), provides a compelling classification in the case of Peru, where at least five types of community demands can be observed: Conservationist demands, where the protection of habitat and biodiversity is in dispute; Nationalist-populist demands, that arise asking for compensation from the company on distributive grounds; Livelihood ecology, where communities object to the changes to their way of life that

arise from the mining project; Socio-environmental justice demands, which speak to inequities of environmental destruction, vulnerable groups, fundamental rights, human rights, and finally, Deep ecology demands, that assert that Nature has an equal right to life as human beings and that mining should not take place on any account. Some of these demands will seek to block the mining project completely, while other demands will tolerate the mining project as long as some petitions and are met. Other classifications of conflicts focus on whether or not the communities are fighting with the mining company or whether they are fighting with local governments involved (Arellano-Yanguas, op cit:628).

Where is the mining company?

While the above insights are extremely useful in understanding mining conflicts in Latin America, they appear to focus their attention on affected communities, which is only one of the elements in the tripartite dynamic between governments, companies and communities which unfolds in mining conflicts. In this sense, it has been noted that the literature has focused on the community as the primary subject of analysis (Kemp, 2011), omitting in large part the role of the mining company in these conflicts. This is a common problem in the analysis on mining conflicts, where mining companies are often described with 'monolithic' and 'simplistic' characterizations (Ballard and Banks, 2003:290), and therefore the literature on mining conflicts faces a challenge in understanding company behaviour.

Relevant work on mining companies relates less specifically to mining conflicts as such and more generally to mining companies as social and economic actors. The relevant literature falls into two areas: firstly, debates on corporate social

responsibility (CSR) and secondly, organizational and market oriented research relating to the institutional entrails of companies and their operational priorities. The debate on CSR arises from the idea that there is a 'business case' to integrate social responsibility programmes into company activities to further environmental, social and cultural outcomes (Humphreys, 2000). Scholars are generally either quite optimistic about the potential benefits of CSR (Margolis and Walsh 2003, Hilson, 2012), or strongly critical based on their doubts about the impact it has on the wellbeing of communities (Frynas, 2008, Blowfield, 2005). By way of overview, Sagebien and Hellams' (2006) extensive review of the literature summarized the arguments as falling into four broad categories. Arguments for CSR were based on claims that CSR made either "good capitalism", "good development", "bad capitalism" or "bad development" (ibid, 2006). While an interesting debate, it is important to note that this discussion on CSR takes its departure points from overtly normative viewpoints. While I do not object to these normative frameworks as such, I content that for the sake of understanding company responses to conflicts, the literature on CSR discussion lacks the empirical foundation on which to analyse these questions. In this sense, I do agree with the judgment of Frynas that the literature one CSR is a "confusing field" that does not answer key questions about how companies operate (op cit, 2008:276).

Finally, scholars from international business, industrial ecology, economic sociology and business ethics speak to the institutional workings of companies in social contexts and do go some way in understanding the behaviour of mining companies.

Work from international business is relevant generally in terms of companies and markets (see for example, Shenkar 2004), however this literature has been criticized for its oversights in relation to cultural issues at a local level (Calvano, 2007: 800). Industrial ecology work from authors such as Michael Porter is also useful in understanding how companies link themselves with geography in order to gain competitive advantage in a global setting (2000), as is Coase in understanding how internal company dynamics respond to global markets (1937). Nevertheless, these fields do not specifically focus on mining companies. Those that do look at mining companies include business ethics scholars such as Kemp (2011) who shows how the internal divisions within different departments of the mining company can affect on their response to social issues. In addition, Cragg and Greenbaum (2002) provide a useful analysis of how mining companies think, which is far more operational in its focus than ethical or community focused. Beyond these, perhaps the most relevant analysis is that of Franks (2013), who questions the ways in which mining companies understand conflicts in terms of their operating costs, positing that companies could do more to understand how conflicts affect them.

IV. *CONTRIBUTION TO THE LITERATURE:*

This research outlined above, although relevant in terms of theory building and conceptual mapping, does not attempt to predict how mining companies will respond to conflict under certain market, political and social conditions. It has been shown that scholars from a number of fields are interested in mining conflicts given the complexity of questions that surround them. Nevertheless, scholars have for the most part overlooked the role of mining companies in these conflicts. The field of political economy, (including Resource Curse Theory), political ecology and human geography have focused on the role of communities and to a lesser extent governments, to the detriment of analysis on companies. In the case of more business-related literature, while these scholars have examined companies, they have either overlooked mining companies specifically (as in the case of international business and industrial ecology), or not done so in a way that predicts their reactions to mining conflicts in specific market, political and social conditions (as in the case of business ethics literature). In this way, my research is well placed to contribute, given that company behaviour represents an important gap in the literature on mining conflicts. By approaching the issue from a political economy perspective, a broad view on mining companies will be taken in order to fill in the gaps in the literature, which has not analysed how market conditions dictate their responses to conflict under certain political and social conditions.

V. HYPOTHESIS:

The available literature allows for a solid foundation on which to approach my research question. As such, my hypothesis is as follows: **From a range of variables, mineral price will most strongly affect mining companies' responses. Mining companies will be more likely to concede to community demands in rising price scenarios.**

The justification for this hypothesis is based on two grounds. Firstly, although the literature on mining conflicts does not draw us to this conclusion, analogous literature from industrial relations and bargaining theory has shown that business will be more favourable to worker demands in times of prosperity and high profit (Ashenfelter et. al, 1969:41 Marglin, 1990, and others). Given the detrimental effects that conflict has on mining projects in terms of delays and disruptions, I contend that mining companies are more likely to concede to community demands in boom scenarios when gold prices are high, since they are taking higher profits and more is at stake for their primary responsibility to maximise shareholder profit. Also by way of analogy, in another field of study, Luder (2006) provides a typology of how businesses respond to civil rights movements in the United States, categorizing their responses into four types: Accommodators, Vacilators, Conformers and Resisters. These types all hinge on the key question of costs: costs of disruption caused by social movement, and the cost of the concessions requested. In this sense, parallels can be drawn with the mining industry, which, according to Vice Minister of Mining of Peru, is "an industry based on costs." (Shinno, 2012). It is important to test this hypothesis with a number of independent variables that are viewed to most directly

impact the mining company's bottom line in relation to mining conflicts. In this sense, five independent variables will be selected for discussion in my methods: price, regulatory framework, political context, nature of mining conflict, stage of mining project. These issues will be discussed in my quantitative methods below.

Secondly, it is important to note that I have arrived at this hypothesis by carrying out data analysis on nineteen conflicts in a smaller typology analysis (Penman: 2013). In this analysis, in 78% of cases, mining companies in some way capitulated to community demands and on a number of occasions they were more willing to cave into demands once mineral prices had risen (ibid, 2013). In discussing this hypothesis, my methods will advance in two stages in order to test the validity of these propositions.

VI. METHODS:

There are a number of ways that gold mining companies can respond to community demands, including through confrontation and forceful responses, negotiations, economic compensations, or even by suspending the mining project. Understanding and explaining the variation in this response is the subject of this research. I depart from the idea that in order to test causality, the most convincing research design is a controlled randomized experiment. However, in the real-life conditions of my project it is practically impossible to randomly select cases and control them.

Accordingly, I will use methods that compensate for the absence of random assignment, using **the response of mining companies as the dependent variable.**

Justification of mixed methods:

Two approaches will be combined in order to examine my research question – the first will use a large data set using **multivariate regression**, and the second is a **comparative case design.** This mixed methods approach can thus be annotated as quan → QUAL (Morse, 2003, p198). I justify the use of mixed methods as I believe it is the strongest way to understand a phenomenon because it "can combine the reliability of counts with the validity of lived experience and perception" (ibid: 119). I will also be using quantitative work to infer correlation and then qualitatively validate these findings (ibid). The following regression analysis is the first step in my hypothesis testing, while the qualitative framework for comparative case study is merely in working design phase and still only a potential.

I. Multivariate regression analysis:

In measuring the effects of the mining boom on company behaviour, there are a number of factors that may influence company decisions, with the price of minerals being only one of these. As such, it is necessary to carry out an analysis on these factors in order to provide depth and validity to the research. This regression

analysis will take approximately **forty mining conflicts at open cut metals mine sites owned by transnational companies during the period 2002-2012 in four key mining jurisdictions in Latin America - Argentina, Chile, Mexico and Peru.** These countries have been chosen due to their significance as leading mining producers in the region and the similar styles of mining that take place in each country. Data will be gathered through desk-based research using available government electronic archival records on registered mining conflicts, mining company annual reports and media articles, citizens' observatories on conflicts as well as collecting academic literature on these conflicts. This research will provide comprehensive synopses of each conflict, which will then be classified according to a number of variables.

Multi-variate regression will be needed to control for possible confounding factors given the variation in mining conflicts, in line with the view of Angrist and Pishcke that "regression can … be used to approximate experiments in the absence of random assignment" (2009:24). Given that multiple independent variables are observed in the data set as well as multiple dependent variables, multi-variate regression is needed. If the dependent variable (the response of the company) were singular and occurred only once, a multiple linear regression would be needed (Punch, 1998). However given the response of the company changes over time, I therefore will need to deal with multiple dependent variables, and as such it appears that multivariate regression is needed.

There are five independent variables, which are:

Price Level – (Interval variable ranked from 1 to 5) Gold, copper and silver prices will be ranked according to international indices that are updated daily from sources such as the London Metals Exchange. These prices will be ranked according to the period within which the mining conflict took place.

Regulatory framework – (Ordinal variable ranked from 1 to 5) I will use the Annual Mining Survey compiled by the Fraser Institute (www.fraserinstitute.org), a Canadian think tank which every year carries out a survey with responses from over 600 mining companies worldwide and based on this provides a yearly ranking of the regulatory framework (environmental, social, fiscal and administrative) in key mining jurisdictions worldwide, according to the opinions of mining companies themselves. Among the sample, Chile is considered the most favourable investment climate in the region, Peru and Mexico in the middle, and Argentina further down the ranking scale. In this way, countries will be ranked according to the favourability of their context for mining investment.

Political context- (Ordinal variable ranked 1 to 5): I will use the Worldwide Governance Indicators published through the World Bank (worldbank.org/governance/wgi/index.) for national level data in each of the countries, in order to rank their political contexts based on issues such as rule of law, corruption, violence and governance, all of which are key issues for the mining industry in considering the political risks associated with its

investment. However, this data set does not include information on subnational governments, which will be a very important issue for my analysis especially in countries such as Peru and Argentina in which mining rents are decentralized to provinces and municipalities. With respect to this, I will draw on newspaper reports, government data and personal expertise to code the subnational contexts that affect each mining project, based on similar criteria as the WGI – governance, rule of law, violence and corruption within the relevant regions and municipalities.

Nature of community conflict and opposition: (Nominal variable 0-1 with Dummy). Although there are a number of types of community based conflicts that oppose mining projects, for the purposes of this regression and for simplicity, conflicts will be categorized into two types: those that wish to block the mining project completely, and those that are willing for the mining project to go ahead subject to certain conditions. As such, this will be a nominal variable ("Go Ahead/Not Go Ahead") with a dummy.

Stage of project (Ordinal variable coded 1 to 8) It is important to remember that the mining industry is a capital-intensive industry and that especially during the exploration and development stages, a huge amount of capital is needed to fund operations before any significant profit is seen. Once production has started, profits will start to flow. As such, the stage of the project (exploration to closure) will determine the cost pressure weighing on the company. Conflicts will be classified based on what stage the mining project is in. The project will ranked with the 8-stage classification provided

by Franks, from prospecting to development right through to mine closure (op cit, 2013).

The aim of this multivariate regression is to help predict what factors are most likely to influence company responses to community conflict. Based on the outcome of the regression, it will then be possible to focus on the most important variable that arises. My hypothesis posits that price will be the most important variable; however this will be tested in the two-part approach of mixed methods.

II. Comparative case study:

Although it is not possible to predict the outcomes of the regression at this stage, it is nevertheless worthwhile to sketch the possible outline of a comparative case study that will arise subsequent to my quantitative analysis. It is important to recall that my hypothesis presupposes that price will be the most important variable that affects company responses, and will test company responses relating to this variable, with the prediction that companies will be more willing to concede to community demands placed on them when prices are high. This qualitative framework is as yet a possibility only at this stage, and could be re-designed if another variable is seen to outweigh price in its importance.

The comparative case study will use two countries that are both similar in their importance as gold mining countries, yet different in terms of political and economic

conditions. While it is difficult to carry out this comparative case study under true experimental conditions, given the limitations on random assignment and the integrity of control groups, of the three characteristics of random experiments outlined by Freedman, Pisani and Purves (Dunning, 2007: 15) this study does allow for one crucial element, which is the "intervention" that arises in the experiment. This is gained from the spike in gold prices pre-2004 and post-2004, which produces an "as-if" random assignment brought about by "naturally occurring phenomena" (Ibid:16), as found in natural experiments. It is important to note, however, that a number of authors (Gerber and Green, 2012:17, among others) would call this a "quasi experiment" that takes sudden events to be "near-random treatments."

This study will select four gold mining projects from Mexico and Peru, which have been matched for their characteristics along relevant control variables (Z). The independent variable (X) that varies in each case will be the price of gold in different time periods (either low or high). Studying two cases in each country will mean that intra-country and inter-country comparisons can be made and there is less variation between cases within each country.

This case study design intends to limit the universe of independent variables to just one key variable – price – and in this way focus on market conditions as a key element in order to test my hypothesis. This qualitative approach to case study research will complement the quantitative approach outlined above which is designed as a more exploratory exercise.

The comparative case design is outlined in the table below:

Y = Response of gold mining company to community based conflict

X = International gold prices (high/low)

Z = conditions which will be matched (control variables)

		X	Z_1	Z_2	Z_3	*Z4*
Peru	**Case 1**	**Low Prices**	Significant conflict	Large open pit mine in production	Senior foreign company	Political conditions (national/subnational)
Peru	**Case 2**	**High Prices**	Significant conflict	Large open pit mine in production	Senior foreign company	Political conditions (national/subnational)
Mexico	**Case 3**	**Low Prices**	Significant conflict	Large open pit mine in production	Senior foreign company	Political conditions (national/subnational)
Mexico	**Case 4**	**High Prices**	Significant conflict	Large open pit mine in production	Senior foreign company	Political conditions (national/subnational

A possible way for controlling for confounding factors in my case study design is to select two different projects from the same company in each country. In this way, I propose to use two projects in Peru from Barrick Gold, the world's largest gold mining company (www.barrick.com) and two projects in Mexico from Goldcorp, also within the top gold producers in the world. Both of these mining companies are Canadian, which again helps to control confounding factors based on the country of origin. In Peru, the first mine, Pierina, involved a conflict which began in the context of low prices, while the second mine, Lagunas Norte, involved a conflict which

began in the context of high prices. As much as possible, political factors are being controlled for here, given that both projects took place in Post-Fujimori dictatorship Peru under the same president, Alejandro Toledo. In addition, although it was not possible to find two cases from the same province in Peru that fulfilled the conditions of the case study design, the two projects selected from Barrick Gold are situated in neighbouring provinces – Pierina is in Ancash province, and Lagunas Norte is in a neighbouring province. This somewhat controls for the lack of random assignment in relation to geography.

In Mexico, once again, the first case – Los Filos mine - occurs in a price scenario that is relatively lower than the second mine – Penasquito mine – which occurs at the very height of gold prices. Both conflicts occur under different presidents in Mexico, which nevertheless represent the same party and the same mining policy (Vicente Fox and then Felipe Calderon, both of the PAN party). Finally, once again these gold mines do not occur in the same state of Mexico, however they have been matched due to their location in central Mexico and their similarity based on the fact that they are regions with a tradition of mining in the area.

The criterion described above brings us to the following case selection:

		X	Z1	Z2	Z3	Z4
Peru	**Case 1** **PIERINA MINE**	**Low Prices** **Conflict begins 2002**	Labor demands, violence and deaths	Large open pit mine GOLD	BARRICK GOLD	Post Fujimori Peru Neighbouring provinces
Peru	**Case 2** **LAGUNAS NORTE MINE**	**High Prices** **Conflict begins 2005**	Major conflict with community - environmental	Large open pit mine GOLD	BARRICK GOLD	Post Fujimori Peru Neighbouring provinces
Mexico	**Case 3** **LOS FILOS MINE**	**Low Prices** **Conflict begins 2007**	Significant conflict - compensatory	Large open pit mine GOLD	GOLD CORP	PAN period in Mexico Central Mexico – traditional mining area
Mexico	**Case 4** **PENASQUITO MINE**	**High Prices** **Conflict in 2009-2011**	Significant conflict - compensatory	Large open pit mine GOLD	GOLD CORP	PAN period in Mexico Central Mexico – traditional mining area

Data collection:

At this point it is important to mention that I am fluent in Spanish and have worked in Latin America for over five years. I hold a range of contacts in the mining sector, with NGOs and government, all of which I will hope will facilitate field work for my case studies. Approximately three months will be spent in each country, including

time spent in the capital cities and directly at the mining site. Field work and **semi-structured interviews** will then be carried out at these mining sites in order to track the nature of the company's response. Semi-structured interviews of mining company representatives, community members and public servants responsible for dealing with mining conflicts will be carried out to complement further data collected from desk-based sources on these mining conflicts. Snowballing techniques with interviews will be used to ensure that the most important perspectives are taken into account in relation to the response of companies to these conflicts – both from within the company and without. With my interview technique, it is important to keep in mind that "it is not the obligation of a subject to be objective and tell us the truth" (Berry, 2002:680), and indeed with a subject as complex as a large mining company, it will be necessary to carefully craft interview methodology to ensure I gain the most impartial insights as possible, from a number of sources. In addition to interviews, I will supplement my research with analysis of **company annual reports, government archives, both digital and physical.**

Timeline for thesis:

Jan –March 2014: Quantitative regression carried out

March 2014: Ethics proposal submitted for fieldwork

June 2014 – December 2014: Field work (3 months Mexico, 3 months Peru)

Jan – June 2015: Transcribing and processing fieldwork data

June 2015- July 2016: Preparing for submission, July 2016.

Strengths and weaknesses of research design:

This research fulfills three fundamental conditions for testing causality (Johnson and Reynolds, 2012: 168). Firstly, this research project provides for covariation, by framing independent variables (X) that are predicted to influence the dependent variable (Y). Secondly, the changes in the independent variable (eg: gold price, regulatory framework, conflict level, etc) chronologically precede the dependent variable. Finally, possible confounding factors have been eliminated as far as possible to eliminate spuriousness. In addition, the design benefits from the possibility of gathering both a large data set to carry out quantitative statistical analysis and also a small-N qualitative analysis for contextual insight.

Nevertheless, from the outset the research question faces a number of challenges. Firstly, the changing response of mining companies is influenced by many factors which raise the risk of "omitted variable bias", which could provide for spurious outcomes (Horiuchi, 2013). It is important to note that some important variables omitted in my regression may only become apparent during my fieldwork research, and hence this is a risk for the validity of my quantitative design that needs to be taken into account. Finally, it is most difficult to factor in importance of political, cultural and economic differences in my focus countries, which although they have been taken into account as much as possible, have not been considered in all their manifestations. However, given that I have intra-country analysis with my case-study research, I hope to use the observations from within these countries to provide a more compelling narrative.

VII. PRACTICAL CONSIDERATIONS FOR THE THESIS:

- **Language:** As mentioned above, I am a fluent Spanish speaker, which will greatly facilitate my access to research reports as well as to interviewees. No interpreter or translations are required.
- **Skills:** I am not formally trained in quantitative techniques, however I have had some instruction thus far on these methods and in January 2014 I will be taking an intensive course on statistics run by the Australian Consortium for Social and Political Research Inc. (ACSPRI).
- **Time constraints:** While mixed-methods research does involve a lot of time and processing, it can also be argued that the background work is similar for both the regression analysis and the case study. Nevertheless, time and logistical constraints will be a significant risk in completing my candidature on time. In the event that the regression proves too timely with 40 conflicts, I will reduce the data set to 30.
- **Access to mining companies, government representatives and interview participants:** At this stage, I already have some useful contacts from which to build for my fieldwork research. No doubt the greatest challenge will be gaining access to mining companies and maintaining their trust and goodwill, however my current list of active contacts that are relevant to my research already include:
    - Director General of Mining of the Ministry of Economy of Mexico. Met and interviewed him in May 2013 and he has agreed in writing to receive me in Mexico at the Ministry of Economy.

- President of the Mexican Chamber of Mining, peak industry body for mining companies in Mexico: personal contact.
- Vice Minister of Mining of Peru: Met and interviewed him in May 2013 and he has agreed in writing to receive me in Peru.
- Public servants and mining geologists in both the Peruvian and Mexican governments.
- Representative of the Peruvian government responsible for mining conflict negotiations.
- A number of think tanks and NGOs in Peru and Mexico focused on mining conflicts and related issues.
- High level lawyers from DLA Piper lawyers that consult mining companies in the region.
- (Possible) linkage with Goldcorp executives in Canada.
- (Possible) Offer of indirect linkage to academic who formerly carried out his PhD on Barrick Gold mining in Peru.
- Australian diplomatic and trade officials in Latin America.
- Small scale Australian mining company executives working in Peru and Mexico – contact already established.

VIII. POSSIBLE CHAPTER STRUCTURE:

Chapter 1:

Introduction and literature review

Chapter 2:

Substantial overview of boom context in Latin America

Factors that influence mining companies' behaviour – explain in more detail.

Chapter 3 & 4:

Quantitative review - regression

Divide variables

Chapter 5:

Pierina mine

Chapter 6:

Lagunas Norte mine

Chapter 7:

Los Filos mine

Chapter 8:

Peñasquito mine

Chapter 9:

Comments linking case Studies to quantitative data

Chapter 10: Conclusion

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